

FirstGlimpseTM

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Making Television Personal



HP's new MediaSmart LCD HDTV brings your photos, music, and video from your PC to your TV. Find out more on page 11!

Back-To-School Blowout

Pitch-Perfect Audio For Your Home Theater

What's New In PDAs & Smartphones?



You Have The Look . . . **Now Get The Sound**

Learn How To Get Theater-Quality
Sound For Your New HDTV In The
October Issue of *First Glimpse*

Articles Include:

- What To Look For In
Home-Theater-In-A-Box
(HTB) Products
- How To Assemble
Your Own Audio System
- The Best Brands
For Dream Audio Setups

Also:

- What's New
In Digital Cameras
- Myth vs. Reality:
The Truth About MP3 Players

All This & More
In The Next Issue Of *First Glimpse!*

Issues Available Sept. 19, 2007

On Our Cover: *Featured on our cover this month is HP's MediaSmart LCD HDTV.*



Cover Story

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With You

Open

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Lifestyle Close-Up: Back To School

Summer is ending, and it's time to start preparing the students in your life for another school year. Along with backpacks and clothes, families are purchasing lots of new electronics gear as students of all ages head back to the classroom. Notebook PCs, MP3 players, digital cameras, and assorted accessory items all make great gift ideas for young scholars. We round up some examples of our favorite student gift ideas for you to peruse in this issue.

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Home Theater

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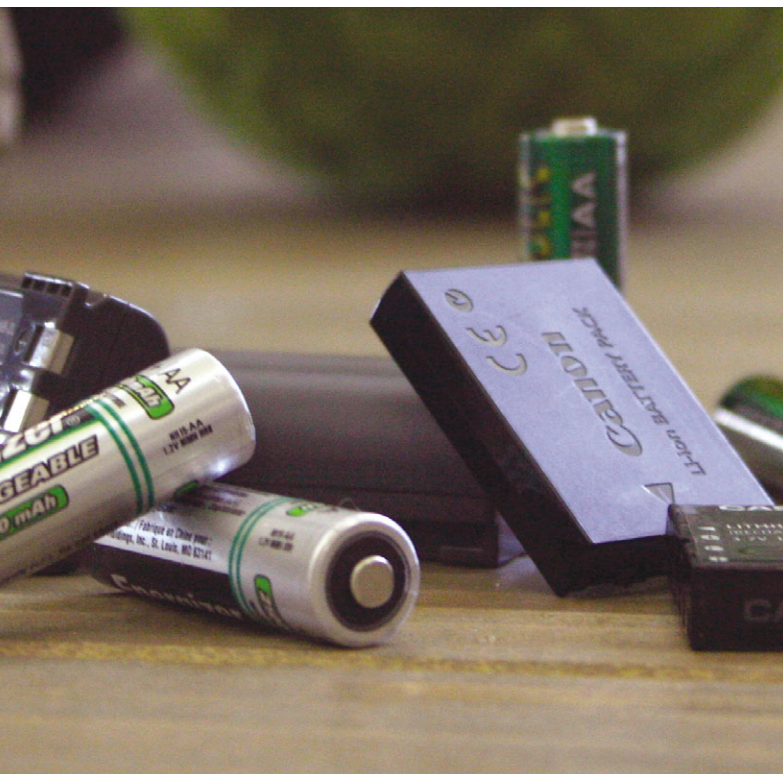
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Digital cameras and camcorders are changing the way we record the moments of our lives, from quick snapshots of favorite vacation spots to priceless video clips of first steps and other important milestones. Get to know your new digicam or camcorder and learn what to do with your photos and video once you have them in our Digital Imaging section.

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Whether you love 'em or hate 'em, almost everyone uses a computer sometime during his or her day, and even if you don't, chances are your spouse or kids do. In this section, you can familiarize yourself even more with this ubiquitous CE device, and we'll also lighten things up a bit with monthly comparisons of the hottest notebook computers and home printers.

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We're willing to bet that you can't part with your cell phone or iPod—or both! In this section, we'll tell you everything you need to know about mobile phones and their service plans, and we also cover MP3 players and the cool accessories that go with them. If you love the feeling of freedom you get with no wires or cords, this section is for you.

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CE Lite

Most CE devices are all about fun. Check out each month's Exit page for cool gift ideas for loved ones—and for yourself.

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Editor's Note

SPECIAL NEWS: We'd like to congratulate our Editor, Katie Sommer, and her husband Miah on the recent birth of their son, Henry James Sommer. Katie is going to take some well-deserved time off, so other editors on staff will be filling in this space the next couple of issues. In the meantime, enjoy being a new mom, Katie!



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First Glimpse Special Product Section

This special product section is produced in partnership with leading consumer electronics manufacturers and allows us to provide readers with the most timely product information possible. Browse through these First Glimpse pages to learn about the latest hot products.

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FirstGlimpse®

Special Product Section

HP 42-inch High-Definition 1080p LCD TV (LC4276n)

MSRP: \$1,799

www.hp.com

Available at select Best Buy™ stores and www.bestbuy.com



Boost Your Entertainment Experience

HP's 42-inch High-Definition 1080p LCD TV (LC4276n) transforms ordinary television into extraordinary entertainment with its stunning picture performance and image clarity. This full 1080p HDTV delivers twice the pixel count of 720p, and its advanced LCD technology offers superb color accuracy, as well as deep blacks. An 8ms (millisecond) response time minimizes motion artifacts in fast moving scenes, while the HP Visual Fidelity Engine enhances picture quality with dynamic color, contrast, and brightness processing. With its extensive digital and analog connectivity options, you can seamlessly integrate the LC4276n into any existing entertainment setup.

Other features include:

- 42-inch, 1080p LCD TV can be wall-mounted or stand on a tabletop
- HP Visual Fidelity Engine analyzes signals to automatically adjust contrast and color intensity for optimum viewing
- Fast 8ms panel response minimizes motion blur that can occur during action scenes
- Connectivity options include three HDMI and two component ports, as well as a PC input
- An integrated ATSC/NTSC/Clear-QAM tuner that can receive high-def content
- HP Total Care provides 24/7 telephone support and one free year of in-home service



FirstGlimpse®

Special Product Section

HP 50-inch High-Definition Plasma TV (PL5072n)

MSRP: \$1,799

www.hp.com

Available at select Best Buy™ stores and www.bestbuy.com



Elegant Video Perfection

Get truly stunning high-definition TV results with the HP 50-inch High-Definition Plasma TV (PL5072n)'s color performance, brightness, and 10,000:1 contrast ratio. Several advanced video enhancements are tweaked by the HP Visual Fidelity Engine to greatly reduce image noise, smooth diagonal lines for a sharper picture, and dynamically adjust color intensity and contrast. High-fidelity stereo speakers and HP virtual surround audio processing add compelling, immersive sound but are concealed by the PL5072n's elegant design, for a "picture frame" appearance. To top it all off, HP's plasma display technology produces a thin panel (less than 3.5 inches thick without the included tabletop stand), making it perfect to mount on walls.

Other features include:

- Classic glossy, piano-black finish complements any home décor
- HP Visual Fidelity Engine enhancements improve picture color and clarity
- An included simple, stylish tabletop stand
- Connectivity options include three HDMI and two component ports, as well as a PC input
- An integrated ATSC/NTSC/Clear-QAM tuner that can receive high-def content
- HP Total Care provides 24/7 telephone support and one free year of in-home service





**Klipsch Quintet™ SL
Home Theater System**
MSRP: \$1,449 (as shown)
www.klipsch.com
Available at select Best Buy™ stores
and www.bestbuy.com



Thrill Your Soul

A perfect match for flat-panel TVs, Klipsch's new 5-channel Quintet SL surround sound package is built for passion, excitement, and intrigue. By applying the same cutting-edge technology as the company's professional cinema products, this system lets you experience everything your music and movies have to offer. So, don't let its flat and fabulous design fool you. A sheer brute strength lies hidden within the Quintet's elegant cabinets, and it's called the Tractrix® Horn. This exclusive technology reproduces a more genuine, lifelike sound and ensures every whisper of dialogue or wailing chorus is heard cleanly and accurately. And if it's more low-frequency power you crave, the company's optional Sub-12 subwoofer gets the hard-hitting job done. No one gets you closer to reality than Klipsch, no one.

Other features include:

- Three left/center/right speakers and two surround satellites
- Horn-loaded technology delivers lifelike performances
- High-output woofers deliver room-filling bass
- Highly efficient so it produces more output using less energy
- Clean, modern design fits any living environment
- Great for wall mounting or placement on a shelf
- 5-channel Quintet SL package retails for \$950
- Recommended Sub-12 subwoofer sold separately for \$499



FirstGlimpse®

Special Product Section

HP MediaSmart Server
MSRP: To Be Announced
www.hp.com
Available at select Best Buy™ stores
and www.bestbuy.com



It's Time For A Home Server

Having multiple PCs in your home often means your photos, music, videos, and other files are scattered about and difficult to locate. The HP MediaSmart Server provides a central location that allows easy access to all your files from any PC or HP MediaSmart TV on your home network. And, when you're away from home, the MediaSmart Server's remote access* will let you get to your files through any Internet-connected computer. Sharing photos couldn't be easier with HP Photo Webshare, a feature that creates a photo Web site on your server for friends and family to see. Not only that, you can protect these digital memories with the MediaSmart Server's automatic PC backups.**

Other features include:

- Two models to choose from with expandable storage capabilities: The EX470 has 500GB and three empty bays, and the EX475 has 1TB and two empty bays

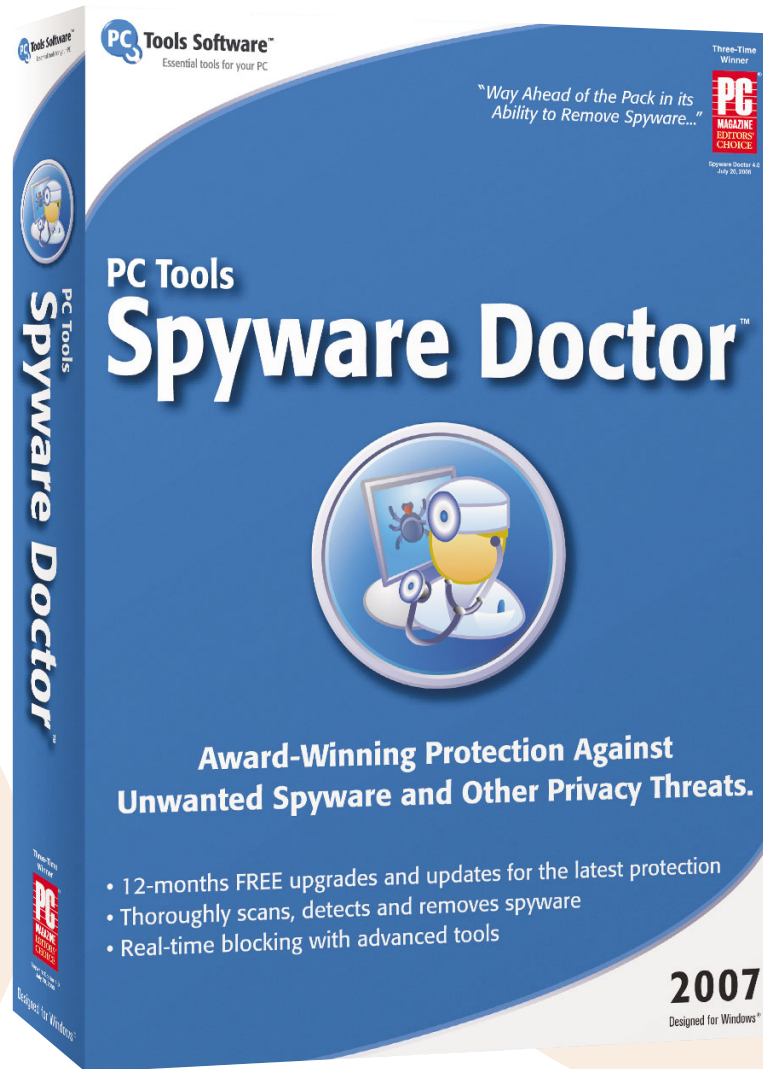
- Remote access feature that will let you open files from any computer with Internet access
- Share photos and videos via HP Photo Webshare
- Automatic PC backups
- Stream files throughout your home network

* Internet service required and not included

** PCs require Windows XP or more recent Microsoft operating system



PC Tools' Spyware Doctor
MSRP: \$29.95
www.pctools.com/spyware-doctor
Available at select Best Buy™ stores
and www.bestbuy.com



Award-Winning Spyware Protection At A Great Price

Spyware can pose a serious risk to your PC as well as your privacy, so it's wise to invest in antispyware protection. Spyware Doctor uses state-of-the-art spyware and adware detection and blocking technology to ensure that your PC is safe. With Spyware Doctor's system scans, you can detect and remove the most advanced threats before they can damage your PC. Spyware Doctor features intelligent automatic protection, which makes the software simple for anyone to use, and it's offered at an affordable price.

Other features include:

- Detects, removes, and blocks spyware and adware threats
- Recommended by experts globally
- Daily updates to ensure you are always protected
- Easiest to use with intelligent automatic protection
- FREE customer support for all users

PC Tools Software
Essential tools for your PC

Altec Lansing inMotion iM600

MSRP: \$149.95

www.alteclansing.com

Available at select Best Buy™ stores and www.bestbuy.com



Fold Up & Go With Your iPod

Unleash your iPod's music anywhere you go with the Altec Lansing iM600 portable sound system. The iM600 was purposefully engineered to offer the broadest feature set and deliver the highest audio performance in its portable speaker class. Its 17 watts of power and custom-built, dual 2-inch neodymium drivers throw out some serious sound with the crystal-clear quality that Altec Lansing fans have come to expect. At the touch of a button, SFX Sound Field Expander technology enhances the stereo listening experience by widening the sound field. The FM tuner provides a music selection beyond the iPod, and an onboard rechargeable lithium-ion battery gives over five hours of unplugged listening. When plugged in, the iM600 recharges itself and the iPod. This impressive package of features and sound is ultra-portable, folding to the flat size of a small book.

Other features include:

- 17 watts deliver powerful, crystal-clear sound
- Rechargeable lithium-ion battery provides more than five hours of continuous play
- SFX technology for a more immersive sound experience
- Superior bass enhancement negates the need for a sub-woofer
- Music enables the iPod alarm clock and sleep timer functions
- Compatible with all dockable iPod models

 **ALTEC LANSING®**



HDTV Reimagined

HP's MediaSmart TVs Connect With You

Since the advent of color television, not much about TV has changed. Sure, the sets are thinner, brighter, wider, and wall-mountable, but those are just refinements to the tried and true television formula that has been entertaining us for more than 50 years. HP is out to change all that with its newest line of MediaSmart HDTVs that seamlessly integrate with your personal computer. It's time to rethink your home entertainment.

Last year, HP introduced the world to its MediaSmart HDTV, which went on to win the 2007 CES (Consumer Electronics Show) Best of Innovations award for its ability to stream photos, music, and videos from a PC. HP's newly announced second-generation MediaSmart TVs add a number of features and a new portfolio of services to the winning MediaSmart formula.

Not Just A TV

Based on outward appearances, the MediaSmart SL4278N (\$2,199) and SL4778N (\$2,799) sets resemble other

42-inch and 47-inch LCD HDTVs you might encounter on display in the home theater section of Best Buy. These sets both have a widescreen native aspect ratio, a built-in speaker bar at the bottom edge of the display, a detachable stand, and a stylish piano-black finish.

Once you turn the set on, however, you'll immediately notice the stunning picture quality thanks to the MediaSmart TV's full HD capabilities and HP's Visual Fidelity Engine. The handful of technologies include motion-adaptive noise reduction to improve picture clarity; advanced edge and photorealistic

sharpness enhancement for sharper images; dynamically adjusting contrast, color intensity, and color saturation for the best picture no matter what you're viewing; and dynamic 3D color-gamut mapping, which accurately displays skin tones and other colors. HP learned a lot about color accuracy from all those years in the printer business (applying the same principles, but painting with light versus ink), but HP's Product Marketing Manager, Stokely Marco, reveals that there's another reason the company is so concerned about displaying true-to-life colors. "With a MediaSmart product . . . you have photos that are streaming to the TV and you know what the colors look like, right? You know that the shirt you wore at the party is a certain kind of red."

Other features you will find on MediaSmart TVs include three HDMI input ports for connecting gaming consoles, a Blu-ray or HD DVD player, or a set-top box. The MediaSmart TVs also have an integrated ATSC/NTSC (Advanced Television Systems Committee/National Television Systems Committee) tuner which lets you view HDTV broadcasts.

Jump Into The Media Stream

HP's MediaSmart TVs aren't just good at doing what other HDTVs do, they're

also adept at streaming media. HP makes it simple to get your photos, videos, and music off your PC and onto the MediaSmart HDTV by integrating both an 802.11a/b/g/n wireless adapter and an Ethernet adapter. The TV comes with a full-color manual that walks you through the basic steps to set up media streaming over a wired or wireless network. To get started, simply connect the MediaSmart TV to your wireless network by pressing the Media button on the remote and following the on-screen prompts. Then, install the PC software that configures media sharing and sign up for the HP Online Media Services.

HP's MediaSmart TVs use Windows Media Player 11 as the backbone of their media streaming protocol, which lets you stream a host of Microsoft-compatible image, audio, and video file formats, such as JPEG (Joint Photographic Experts Group) images, WMA (Windows Media Audio) files, and WMV (Windows Media Video) files. HP's MediaSmart TVs also support a multitude of non-Microsoft file formats, such as AAC (Advanced Audio Coding)—non-DRM only, DivX, MOV, and Xvid with the help of HP's proprietary MediaSmart Services Gateway program.

Another key feature is the MediaSmart TV's content aggregation capability. This means that the TV can pool all shared content from up to 10 DLNA- (Digital Living Network Alliance) and



UPnP- (Universal Plug and Play) compliant computers and devices, and let you access and view it directly from the comfort of your favorite easy chair.

HP's Entertainment Portal

The HP Online Media Services are what makes the MediaSmart TVs a truly well-rounded connected TV. From the MediaSmart TV's Online Services menu, select CinemaNow (www.cinemanow.com) to start browsing a catalog of thousands of movies and videos. You can buy and rent videos and have them downloaded to your primary PC. But unlike most downloads, HP's MediaSmart TVs let you get a jump on the action with the progressive download feature, which lets you start viewing the purchased or rented content within minutes of initiating the download. Marco says this feature ensures that "by the time you run and get your popcorn, you're ready to watch the movie."

Get MediaSmart

HP's MediaSmart LCD HDTVs are a unique all-in-one media playing machine, but there are still a few extras you'll need to take full advantage of the MediaSmart services and features. If you've got the following, then you're all set.

- At least one PC to store your downloaded movies and act as your video, music, and photo server
- An active broadband Internet subscription
- An 802.11g or 802.11n wireless adapter or a wired network
- Registered accounts at SnapFish, CinemaNow, and Live365 (registration is free)
- An HDTV-capable antenna for receiving OTA (over-the-air) HD signals or cable or satellite HD service



Another of HP's Online Media services lets you listen to Internet radio, courtesy of Live365 (www.live365.com). You'll need a valid account with the Internet radio provider, but signing up is free and easy. Unpaid subscribers will have access to a selection of free stations, while premium memberships (available for a \$4.95 monthly subscription fee) will get access to hundreds of stations that play without commercial interruption.

The HP Online Media Service also lets users take advantage of SnapFish (www.snapfish.com), an online photo sharing site, from the MediaSmart TV. Simply create a free account and upload your photos to the SnapFish photo library to access them from the MediaSmart TV. The SnapFish service even lets you browse photos from photo libraries of your friends and family.

HP puts the online connectivity of the MediaSmart TVs to great use with its

video and information feed that aggregates a variety of content. Although HP couldn't comment on which service providers had signed on as we went to press, Marco says they will be recognizable and reliable sources for news, weather, and more. The service will also offer fun video clips, local traffic reports, TV programs, movie trailers, and other entertainment content. And because the content is all streamed directly from HP's servers, you don't even need your PC on to view it.

TV Meets PC

The PC has revolutionized the way we think about cameras and portable music players, so it only makes sense that the king of the video format, the TV, was next on the PC's hit list. But once you get MediaSmart, you might never leave your sofa again. **FG**

BY BRIAN L. WENDAME

Wireless Or Wired?

For wireless networks, streaming media is serious business. Streaming music and photos alone can sometimes bog down an 802.11b network that maxes out at 11Mbps. If you try streaming standard-definition video, you can easily experience degraded performance and choppy playback. Both the 802.11a and 802.11g standards, which are capable of up to 54Mbps, can often handle all of the above, but may be less adept at handling high-definition content. "If they plan on streaming a lot of HD content," Marco says, "we would suggest a user upgrades the router [to 802.11n]."

If you're not willing or able to upgrade your wireless network to stream HD content, then your other alternative is to use a strictly wired network with 10/100-capable network cable and a 10/100-capable router in between the MediaSmart TV and your PC. ●

Will It Work With My Network?

Although the 802.11n standard is not fully finalized, routers, access points, and other consumer electronics devices that use the ultra-fast wireless networking technology have been available since last year. HP's Marco says the company follows the standards closely and can issue automatic updates to the TV's software if deemed necessary. ●

ce news

COMPILED BY RACHEL DEROWITSCH

Kodak Revolutionizes Digital Image Capture Technology

Kodak's (www.kodak.com) new image sensor technology will increase sensors' sensitivity to light by as much as four times more than current sensor designs.

Now, most color image sensors are based on a pattern created by Dr. Bryce Bayer, a Kodak scientist, in 1976. The pattern includes red, green, and blue pixels, and half of the pixels on the sensor collect green light. Kodak's new technology adds clear pixels, which are sensitive to all wavelengths of visible light. These sensors capture a higher percentage of the light than cameras based on the old green-light models. In addition, they'll allow faster shutter speeds, which will reduce motion blur on moving subjects, according to Kodak.

Although Kodak is developing sensors that incorporate the new technology now and expects to have the sensors available in early 2008, it doesn't expect cameras with the sensors to be available until later in the year.



KODAK Image Sensor Technology Improves Camera Performance for Stop Action Photography

Kodak

Envision Introduces Windows Vista-Compatible LCD Monitors

The newest line of LCD monitors from Envision Peripherals (www.envisiondisplay.com) lets users experience Windows Vista as Microsoft intended.

The 19-inch G918w1 (\$219) showcases Windows Vista Premium's Sidebar and Aero Flip features. It sports an 800:1 contrast ratio and supports 720p and 1080i HD resolutions. Both the 19-inch

H1981 (\$229) and the 17-inch H1781 (\$199) are Vista-ready, feature a 700:1 contrast ratio, and support a 1,280 x 1,024 resolution.

All three monitors are active-matrix displays, with an antiglare treatment that reduces light reflection and helps protect from scratches and surface damage.



LG Introduces New Colors, Features For Chocolate Phone

LG's Chocolate mobile phone (\$299.99; us.lge.com), with service plans from Verizon Wireless (www.verizonwireless.com), is now available in tasty new colors. In addition to its traditional black hue, consumers now can buy the Chocolate in Black Cherry or Blue Mint. Previous Chocolate colors include black, white, red, and green.

The Chocolate phones sport a new Navigation Wheel and also support up to a 4GB microSD memory card—ideal for users of the VCAST Music service who want to store MP3 files on it—and Bluetooth capabilities.



City Drivers Snatch Up Mobile Navigation Devices

Mobile navigation devices are not just for drivers who seek off-road adventures in the rugged outdoors. City drivers need directional help, too.

According to recent research from the NPD Group, Boston led a list of 45 cities in the first quarter of 2007 with the most navigational units sold per store selling these devices (56.4 units), followed by New York (55.2) and Orlando (55). Salt Lake City (20.9), Denver (23.3), and Indianapolis (24.3) were at the bottom of the list.

Nationwide, stores sold an average of 36.6 mobile navigation units, and the average selling price was \$417. The average selling price in each of the top three cities—Boston, New York, and Orlando—was below the national average price. Denver had the highest average selling price per navigation unit at \$507.

Mobile Navigation Units Sold Per Store

City	Units Sold	Average Selling Price
1. Boston	56.4	\$397
2. New York	55.2	\$399
3. Orlando	55	\$416

Increasingly, U.S. Households Buying Digital Cameras To Replace Older Digital Models

First-time digital camera buyers still account for a significant percentage of digital camera purchases, but increasingly, consumers are buying new digital cameras to replace older digital cameras.

According to the 2007 PMA U.S. Digital Imaging Survey, almost one-fifth (18.2%) of households that bought a digital camera in 2006 did so as a replacement for another digital camera. That's double the percentage of replacement buyers from 2003 (9.1%) and about five times greater than 2000 (3.6%).



Reason For Buying Most Recent Digital Camera

	2006	2005	2004
Additional camera purchase	34.7	35.1	39.9
Replace other digital camera	18.2	15.3	11.7
First digital camera	19.7	20.2	25.6
Replacement for film camera	27.4	29.4	22.8

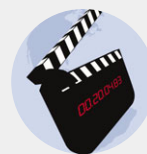
tidbits



Families with school-age children are expected to spend 13% more on **electronics** while back-to-school shopping this year than last year.

Source: National Retail Federation

Of the Internet-connected households in the United



States, fewer than 2% bought **digital video** content in Q1 2007.

Source: The NPD Group



More than 1 billion PCs will be in use **worldwide** by the end of 2008 and more than 2 billion in use by 2015.

Source: Forrester Research

Cell phone users in the U.S. grew to **233 million**



by the end of 2006, and an estimated 12.8% of households use cell phones exclusively.

Source: CTIA



Unique visitors to Facebook.com, once limited primarily to college students but now open to the **general public**, grew to 26.6 million in May 2007, an 89% increase from May 2006.

Source: comScore

Special Feature: Back-To-School Time!



Lexar JumpDrive Secure II 1GB
\$38.99 • www.lexar.com

GEAR UP

Make Back To School Cool



It's back-to-school time again, and if you or any of your dear little ones are headed back to school soon, you're likely getting ready for the Great Shopping Trip. There was a time when you could get away with buying just a new Trapper Keeper and some No. 2 pencils, but those days are long gone. Now stores are packed with a mind-boggling array of computers, peripherals, and CE devices all designed to help make the grade.

If many of these items have made it on the student in your life's wish list, we can help. This section is dedicated to getting the gear you need for going back to school. Whether you're shopping for yourself or for someone else, we'll help you find what you need. Here's a look at what you'll find in this section.

Notebook Computers & Peripherals

If you're going back to school and would like to buy yourself a notebook PC, you'll want to consider one that's portable enough to take with you to different classes. If you're buying for the younger generation, you'll probably also want to make sure the notebook is durable, as dorm life can get rather rowdy. One great notebook option is the Gateway T2060 (\$749.99; www.gateway.com). Its

built-in high-speed wireless connectivity means you or the student in your life can surf on the go, and the heavy-duty housing will withstand school life's bumps and bruises.

USB drives provide a lot of storage in a small form factor, perfect for moving data from one PC to another. Any number of flash drives, such as the Lexar JumpDrive Secure II 1GB (\$38.99; www.lexar.com), will do the trick. When buying a printer, consider an all-in-one that can print, copy, scan, and fax in order to save space and get the most for your money.

iPods & MP3 Players

Music players used to be all about the music, but you may be surprised at how much these little devices can now accomplish. Not only are they handy for drowning out a noisy sibling or roommate, they can also be useful in classrooms where they're allowed. The SanDisk Sansa c240 1GB MP3 player (\$79.99; www.sandisk.com) has an FM tuner and an integrated voice recorder to help catch a professor's words of wisdom. On the pricier end of the spectrum, at \$349 (www.apple.com), you can get an iPod with an 80GB hard drive that will do just about anything, including play music, display full-length movies, and record your voice notes.

Cell Phones, Digital Cameras & More

Chances are that you or your little Einstein already has a cell phone, but if an out-of-state school is in the plan, you may have to adjust your plan or service provider. Check that your plan will offer adequate network coverage at school so roaming charges won't be an issue. It's also smart to make sure everyone's clear on who will be paying the cell phone bill and how many minutes are available each month.

A small, fun digital camera will help students capture and share life's moments even if they're away at school. When buying, look for rechargeable batteries that offer long life, as shopping for supplies isn't usually high on students' priority lists. You may also consider throwing a Web cam into the cart. It might be nice to talk face-to-face once in a while. Just remember not to cringe when you see the messy dorm room.

No matter who's headed back to school this fall, give a little thought to finding the right devices for his or her needs, both in and out of the classroom. It's sure to make the experience memorable, fun, and even educational. **FG**

BY JENNIE SCHLUETER

NOTEBOOKS 101

Buy An "Able" Laptop



Heading back to school is exciting, whether you are just starting your freshman year or finally getting that master's degree. But no matter how you slice it, getting ready for a new school year is expensive. A new notebook may seem like an unnecessary extravagance, but considering how useful they are, it's easy to see why most students these days feel that notebooks are a necessity.

The good news is that it's not too hard to find an affordable notebook that will handle classroom tasks admirably. Whether you're sending your child off to school or getting ready to hit the books again yourself, here are a few features to watch for as you decide on a notebook for school.

Portable

Not every student will carry her notebook from class to class, but she may find it a great way to take notes and have instant access to information online. If the notebook you're buying will be

spending a lot of time in transit, make sure it's lightweight and small enough to fit in a laptop bag or backpack. The HP Pavilion dv2000z with AMD processor series of notebooks (\$879.99; www.hp.com) offers a good example of a quality computer in a small form factor. These compact notebooks weigh only 5.4 pounds but come equipped with Windows Vista Home Premium, plenty of hard drive space, wireless connectivity, and even a Web cam and integrated microphone.

Durable

Durability goes hand-in-hand with portability: Unless your notebook computer will usually stay in one place, get one with a sturdy design and tough housing. It should be able to withstand the rigors of pushing and pulling it in and out of a backpack, commuting to and from classes, and living in student housing.

Long Battery Life

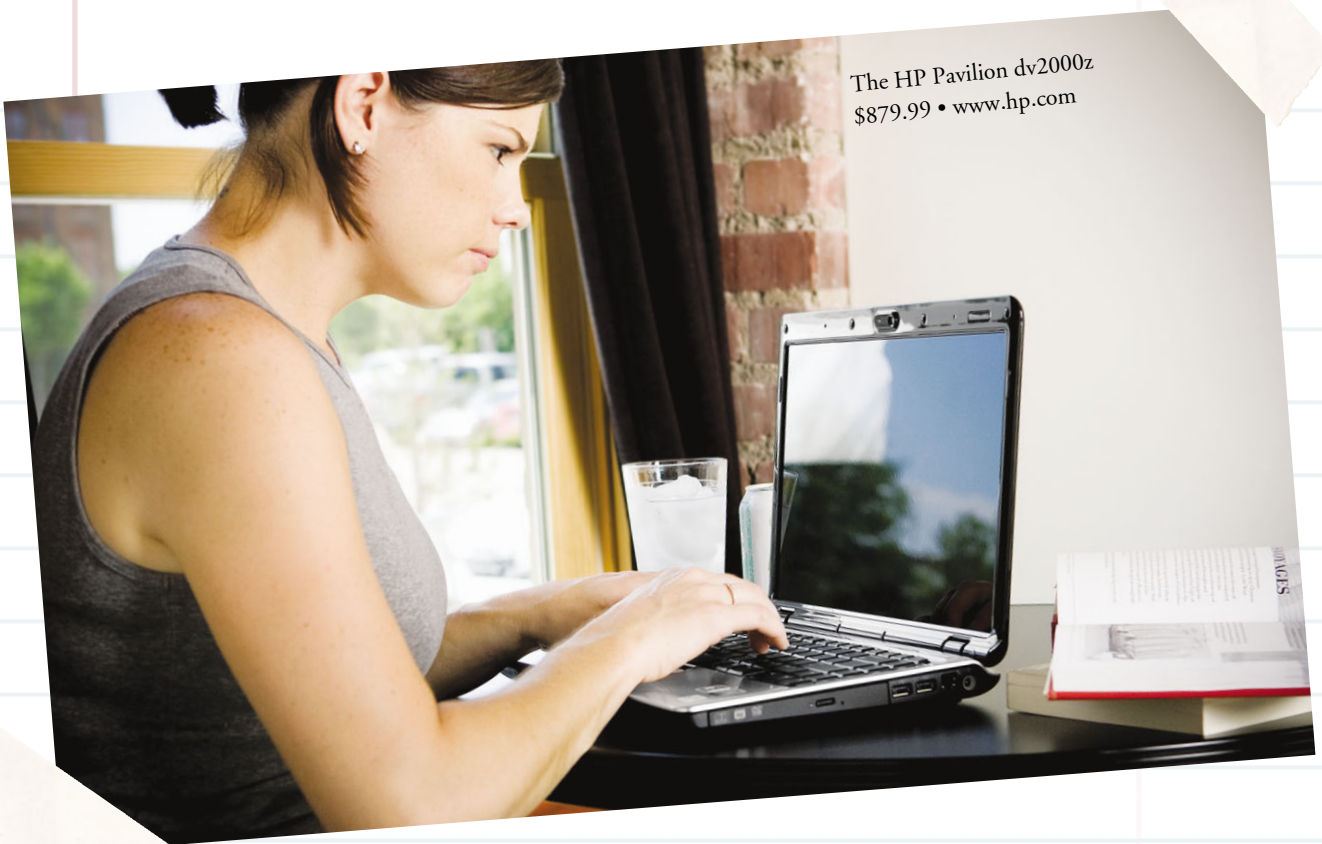
Battery life is also an important consideration if you're buying a

notebook to use from class to class. Of course, activities such as watching a movie will drain a battery faster than just typing notes in class, but look for a notebook that advertises three to five hours of productivity time on a single charge. This should allow a student to get through most of a day's classes without having to always sit in the desk in the corner next to the outlet.

Compatible

It's also a smart idea to do a bit of research into the type of computer software used at the school where you or your child plan to attend. If you have no preference whether your notebook is a PC or Mac, it might make things easier for you to get a laptop that supports what the school uses. Most software these days is compatible with both environments, but it's best to play it safe; compatibility issues can be a real pain, especially late at night with a looming deadline. **FG**

BY JENNIE SCHLUETER



The HP Pavilion dv2000z
\$879.99 • www.hp.com

BUYING FOR A

High School Student

THERE ARE SEVERAL THINGS to consider when buying a notebook PC for your high school student. On the one hand, notebooks are a great investment as a tool for research and other school work so your son doesn't tie up the family computer. On the other hand, notebooks may prove to be a distraction or source of trouble for your student. You may first want to look into the school policy regarding notebooks. Are they allowed in classrooms? Are they allowed in school at all? Or are students required to use school computers so their use can be more easily monitored?

Once you've given these issues some thought and are ready to buy, keep in mind that this will likely be a "starter notebook" for your high school student. He or she will probably get something newer when starting college, so this notebook will only need to be something that can help share the workload already done by a computer you have at home. Look into a basic notebook that provides enough memory and hard drive space to handle school projects and some photos and music. One good example is the Acer Aspire 3690 (\$609; us.acer.com). Even at this price, you get Windows XP Media Center Edition, 60GB of hard drive space, and a 15.4-inch screen.

College Student

THERE ARE TWO MAIN STYLES of use to consider at the college level. If the student plans to use her notebook largely for school work and as a way to take notes in class, portability and durability should be two of the biggest factors to consider. Also look for good wireless connectivity so she can use her notebook at hotspots like the student lounge or local coffee shop.

Some college kids want a notebook that can pull double duty as an entertainment system, though. Students in this group will have to spend more money but should be able to find a notebook that can record live TV, play music and movies, burn content to disc, and more. In order to get a notebook that can do it all, look for one with at least 1GB of SDRAM, more than 100GB of hard drive space, Windows Vista, a 17-inch screen, and a DVD-RW/CD-RW drive. The Toshiba Satellite P205-S6347 (\$1,449.99; www.toshibadirect.com) meets all these requirements and more. It's also compatible with the latest wireless technology and has an optical drive so your student can watch DVDs.

NOTEBOOK COMPUTER PERIPHERALS FOR STUDENTS

Gear Up For Class The High-Tech Way



It's almost a given that a college or high-school student will need a notebook computer. After that exhilarating purchase, however, there's the matter of which peripherals to buy.

First of all, get an extra notebook battery or two. There are too few power outlets in a typical lecture hall, so your scholar won't be able to count on her laptop's AC adapter in class. With a spare power cell, she won't see distracting "low battery" warnings popping up during an important lecture. Best Buy offers batteries for Gateway, HP, and Sony notebooks from \$99.99 to \$199.99.

A USB flash memory drive will let a student grab class materials from an instructor or classmate, share collaborative project files, and so on. Some examples are SanDisk's Cruzer Micro 1GB (\$24.99; www.sandisk.com) and Memorex's 4GB USB 2.0 TravelDrive (\$79.99; www.memorex.com).

Homework still means paperwork, so a reliable printer is a must. An inkjet will print multicolored charts and amazing photos for class projects. However, an all-in-one model, such as the HP Deskjet F380 All-in-One (\$79.99; www.hp.com), with

its print, copy, and scan functions, can save many trips to a copy store. On the other hand, a laser printer, such as Brother's black-and-white DCP-7020 Laser Digital Copier/Printer (\$199.99; www.brother.com), saves her money on printing monochrome materials such as term papers and essays.

Accidents can happen, especially when a student carries around a laptop every day. With a portable hard drive, such as the Iomega 160GB EGo (\$159.99; www.iomega.com), she can keep her data safely backed up. Portable drives are big enough to back up everything on her laptop, yet tough enough and compact enough to be carried in her backpack.



Finally, a college freshman may especially appreciate a pair of Web cams—one for her and one for mom and dad. When used with video messaging software, a Web cam can let her see a friendly face from home. **FG**

BY MARTY SEMS

WHAT A STUDENT NEEDS—& WHY

- ❷ Spare notebook battery or batteries to make it through a day's classload
- ❷ Multifunction printer for printing homework and making copies of research materials
- ❷ USB flash memory drive for easy file sharing
- ❷ Portable hard drive for backups
- ❷ Web cam to add emotional impact to pleas for more money

EDUCATIONALLY SPEAKING

MP3 Players Deserve Backpack Space



tuition paid? Check. Dorm room reserved? Check. New laptop and cell phone ordered? Check. New MP3 player? Check. . . . Hold up. MP3 player? That's not on your back-to-school list for your college- or high school-bound student, but maybe it should be.

True, the primary selling point of an MP3 player will always be its ability to play your favorite music wherever you may be. Still, today's players serve many other useful masters, including several with actual educational value. Take Samsung's 2GB T9 (\$129.99; www.samsung.com), for example. Besides playing music and video, the T9's text reader application lets you

MUST-HAVE ACCESSORIES

NO MP3 PLAYER is complete without extras, including these options:

Docks. Besides recharging an iPod's battery power, docks include speakers, alarm clocks, video screens, lamps, AM/FM radio, CD/DVD players, and more.

Cases. A book bag may cut it, but even a \$10 MP3 player case will go a long way toward protecting against scratches and debris.

Headphones. Although most MP3 players bundle headphones, upgrading options are numerous, including noise-cancelling and sound-isolating models and wired and wireless headphones.

view the notes, outlines, or drafts you store on the T9. Diminutive, lightweight flash-based players, such as the T9 and Apple's nano iPod (\$149 to \$249; 2GB to 8GB; www.apple.com), are also ideal for downloading and listening to educational podcasts. Maybe better is that many MP3 players have a built-in microphone and voice recorder, which is great when your absent-minded freshman needs to verbally remind himself to "Meet homework club at 3 p.m. Tuesday."

Storage-wise, about \$200 can now buy an 8GB player; that's enough to store thousands of classical tunes to help study, industrial dance tracks to help release steam, or indie tracks to help welcome Friday afternoon. Parents can also give their students plenty of musical choices while still maintaining some control. For

example, SanDisk's 4GB Sansa e260R Rhapsody (\$179.99; www.sandisk.com) bundles 60 days of free access to Best Buy's Digital Music Store, which Rhapsody powers, giving your student millions of searchable songs for download. Following the trial, \$14.99 per month keeps the songs active, but discontinuing the subscription is always an option if the grades go south. Visually, the e260R and similar models with color LCDs can ease periods of homesickness by displaying photos and video from home. Further, LCDs can display many downloadable city maps if you're sending your child out of state for school.

Throw in included wireless connectivity, FM radio, and other abilities, and there's plenty to find favorable about MP3 players, educationally and otherwise. **FG**

BY BLAINE FLAMIG



CELL PHONES

Stay Connected This School Year

From a mother's perspective, a cell phone is a double-edged sword in her teenager daughter's hands. It's handy when her child needs to let her know that soccer practice is over, but it can cause trouble if her daughter wastes precious plan minutes chatting with friends and downloading music. Here are some hints to help avoid the pitfalls.

Make the most of your minutes. Family phone plans generally let all of the plan's phones draw from the same bundle of free minutes. How you ration those minutes to your child matters, according to Brenda Raney, spokesperson for Verizon Wireless.

"Let's say you have a bundle of minutes, and you want your young person to use only 300 minutes of

that bundle a month," says Raney. "A recommendation might be to break that down on a daily basis. So, if there are 30 days in the month, you say 'Recognize this 300 minutes means you have about 10 minutes a day.' Because if you put the phone in a hand of a person with a bundle of minutes, that's not necessarily a concept that they understand or have experience with."

Tackle text messaging. If you ignore text messaging, you're missing out on a valuable communication link between you and your student. In fact, for today's tech-savvy teens, text messaging is, "The best way to keep in touch with your young person, be it a late-night 'Are you OK?' to your person away in college or a quick 'Your curfew is



midnight' to a high school student," says Raney.

Choose your phone wisely. You can ensure that your son knows his new cell phone is a tool (rather than a toy), by selecting one with few multimedia features. Text messaging is a common feature on phones, but not all phones support music downloads, and some lack cameras. These no-frills phones often cost less than their multimedia counterparts, too.

PLAN EXTRAS

PARENTS CRINGE when salespeople start talking about the extra services they can add to their cell phone plans, but they'll find that today's add-on selection isn't all entertainment oriented.

If you're worried that your favorite college student will get a flat tire or run out of gas on the way home from school, consider an emergency road service add-on. Verizon Wireless offers Roadside Assistance for \$3 per month; Sprint's Roadside Rescue service will run you \$4 per month. This package generally includes gas delivery and battery and lockout service.

Some carriers also offer direction services for phones that have GPS functionality. The service provides audible directions to help you find your destination from wherever you're standing (or driving). If your college student plans to visit friends at other colleges, this service will help her find her way safely from one campus to the next. ●

Plan for the unexpected. If your child loses the phone or if it's stolen, you may find yourself paying the full price for a new phone. If you worry about your child losing her phone before the contract ends, consider the carrier's insurance. Verizon Wireless offers a Wireless Phone Protection feature (for \$4.99 per month) that replaces your lost phone. Sprint's Total Equipment Protection plan is available for \$7 per month. **FG**

BY JOSHUA GULICK

OUT OF THE CLASSROOM

Gadgets & Accessories To Help Pass The Time



If homework and no play makes Jack a dull, unhappy student" isn't exactly how the saying goes, but it makes as much sense. Like all of us, students need an escape from the daily classroom grind, if only for a few hours. Fortunately, electronic gadgets and accessories provide ample escape routes. You've squared away your back-to-school student with a new notebook, cell phone, and other peripherals, but the following are extras available at BestBuy.com and local stores geared toward helping students blow off some steam and have some fun.

All-night poker games are a rite of passage for many college students. Whether the stakes are pretzel sticks or pennies, Excalibur Electronics' WSOP Plug-n-Play 6 Player Texas Hold 'Em Poker (\$59.95; www.excalibur-electronics.net) lets up to six players engage in World Series of Poker-like combat, complete with sound effects and the ability to display the action on a TV screen. If video gaming is more your student's speed, AK Designs' Creature Wild Furry Furniture (Primate, Mammoth, and Yeti versions; \$19.99; www.ak.com) are inflatable chairs that build in

pouches to hold a remote control or game controller. To efficiently store gaming gear, Atlantic's 4-Tier Wire Gaming Center (\$59.99; www.atlantic-inc.com) can hold three consoles, up to six controllers, and 70 games in a retractable shelf.

Gaming isn't the only, er, game in town, however. For years, high school and college students have turned to music to deprogram. miJam's guitar (\$19.99; www.b2stuf.com) probably isn't garage band-worthy, but it works with headphones, external speakers, MP3 players (including iPods), PCs, and stereos. This digital six-string also has tempo, pitch, and volume controls; lets you record and jam with recorded

music; integrates heavy metal, rock, blues, and bass tones; and even includes a whammy bar. If your child would rather rock the house than an axe, the M-Audio Torq MixLab Digital DJ System (\$129.99; www.m-audio.com) puts two virtual decks with separate pitch and speed controls in your student's hands, along with supporting software; a crossfader; three-band equalizer; audio effects; USB connection; and support for MP3, WAV, WMA, and AAC file formats.

If video is your student's preferred means of relaxation, the multi-functional Archos 30GB 404 Camcorder (\$299.99; www.archos.com) should keep her busy during downtime. Beyond recording and playing back MPEG-4 and other formats on its 3.5-inch LCD, the PlaysForSure-compatible 404 plays MP3s, takes still photos, records voice recordings, reads PDF files, and more. With an optional \$99.99 DVR Station, your daughter can record TV shows and watch them after class. And for peace and quiet, HoMedics' Envirascap Shimmering Towers Illuminated Relaxation Fountain (\$19.99; www.homedics.com) is a desktop-sized fountain with LED lighting that can do the trick. **FC**



miJam's guitar
\$19.99 • www.b2stuf.com

BY BLAINE FLAMIG



Why Do You Need Quality Audio?

Pay Now Or Pay Later

When you're in a movie theater, it's easy to suspend your disbelief. You can really lose yourself in the huge widescreen presentation and theater-caliber sound.

That is, until a splice in the film makes the soundtrack go "ka-thump." At that moment, you're reminded that you're merely watching a recording, shivering in a theater with sticky floors, sitting behind someone with really weird hair.

DVD, BD (Blu-ray Disc), and HD DVD movies don't have splice breaks, so their amazing audio is unbroken from beginning to end. Still, if your TV's speakers or cheap sound system sounds hissy, weak, or uneven, it can really ruin your illusion. And, if that keeps you from enjoying your expensive new HDTV, it's time to think about home-theater audio that will blow you away.

"TVs alone only give you half the experience," says Darren Schwartz, television category senior manager with Best Buy's Magnolia Home Theater. "A large picture with small sound can't compete with a small picture with big sound."

Bring Hollywood Home

The answer may be as involved as a custom surround-sound system built

Whichever route you take, it's a good idea to buy a receiver or HTB-bundled DVD player that decodes Dolby Digital, DTS, and related formats used to store audio on DVDs. Typically, BD and HD DVD players already have built-in decoders for the new, high-quality Dolby TrueHD and DTS-HD formats available on these next-gen discs. On the other hand, if your receiver supports HDMI inputs and outputs, it's more likely to be compatible with any audiovisual components you buy in the future.

"Consumers on average keep speakers for 20 years," Schwartz says. "Very few investments will offer such a long period of use and enjoyment."

To be honest, a pair of quality stereo speakers with a subwoofer (2.1-channel audio) can sound just fine, especially in rooms that would be difficult to wire with rear speakers. And many HDTVs come with decent integrated stereo speakers that sound very nice at moderate volumes, if a bit lacking in bass.

For more immersive entertainment, however, step up to a surround-sound system with clarity and power.

"Directors often spend half their budgets on the audio experience," Schwartz says.

If you want to maximize your enjoyment of your leisure time rather than have continuous reminders of how you minimized

Breakdown Of An HDTV Budget

\$1,599+
HDTV

\$229+ HTB
or custom
sound system

\$1,199 combo
BD/HD DVD
player

\$100 cables

\$99+ wall
mount, TV
stand, or enter-
tainment center

from off-the-shelf components or as simple as an HTB (home theater in a box). An HTB is a kit with all the audio components you'll need, such as a receiver, speakers, stands, and cables.

your audio investment, buy a quality sound system in the first place. **PG**

BY MARTY SEMS

Digital TV Is On Its Way

Two Federal Mandates That Will Affect TV Viewers



A pair of important federal mandates will change the TV-viewing experiences we all have. Although many of us know that these changes are coming to digital television, few of us know the specifics of what these new rules will mean. We'll take a look at two of the most important mandates that will affect you in the not-so-distant future.



on the lookout for these warning labels so that you buy a set that will continue to work after the February 2009 digital switchover.

FCC-Mandated DTV Tuners

The first of the two regulations has actually already taken effect, although it probably hasn't affected you directly unless you bought a new TV within the

past six months. On March 1, an FCC (Federal Communications Commission) regulation went into effect that requires all TV manufacturers to include a built-in DTV (digital TV) tuner. This means the next time you buy a television, it should have an integrated digital tuner.

What this means for you. This FCC decision doesn't have a direct effect on you, other than that it is now harder to find a TV with an analog-only tuner. Of course, you will need a digital tuner by early 2009, so it makes little sense for most consumers to buy a set with only an analog tuner. It is not impossible to find TVs with analog-only tuners because stores had them in some existing inventory before the rule went into effect in March. Stores must clearly label such TVs with a consumer warning, stating that the TV lacks a digital tuner and that it will require a digital converter, such as a set-top box or satellite receiver, to convert signals after Feb. 19, 2009. Companies that fail to label analog-only TVs are subject to citations or other violations from the FCC. When shopping, be

The End Of Analog Broadcast Signals

The other big change is that TV stations will no longer be allowed to broadcast analog signals after Feb. 19, 2009. All broadcasts from that day forward must be digital. That means if you have a traditional analog TV, you will no longer receive a signal and will need to either buy a digital TV or a digital converter.

What this means for you. The switch-over to digital signals will only affect you in February 2009 if your TV has *only* an analog tuner. You have until Feb. 19, 2009 to prepare for the digital switch-over, and this leaves you with two options: You may buy a converter that converts a digital signal to one that your analog TV can display, or you may replace your TV with a newer set that includes a DTV tuner. Remember, as we said earlier, any TV you buy should have a digital tuner unless it is clearly marked with a required FCC consumer-advisory label. **FC**



BY KYLEE DICKEY



Streamline Your HDTV Experience

Cut The Clutter

Whether it's a sleek HDTV, DVD player, DVR, or speaker system, CE devices help us relax and enjoy entertainment in the comfort of our homes. All of these components add to your viewing experience, but there are annoyances that come with the devices. Your equipment needs to be connected, and that means you likely have electrical cords snaking around your living room. You also probably have a

number of remotes—one for each device—scattered around your home. All that clutter can get in the way of enjoying the “Pirates Of The Caribbean” DVD you purchased or can keep your living room from looking neat and tidy, which is important when you have friends over for dinner parties. There are ways to tame your cord tangles and wrangle your remotes. Here's a look at some options starting with the one item that's probably at the center of your home entertainment system: your HDTV.

Your TV is one CE device that can take up a lot of room. Using a stand designed specifically for your TV can help conserve space and provide storage for everything from DVDs to owners manuals. Situating a TV stand in the corner of your room is a good way to accommodate bulky TVs. Shop around for a stand that will hold your TV and work with your current furniture. One model we like is the Bush Corner TV/VCR Stand For 36-inch TVs (\$59.99; www.bestbuy.com).

Premium Home-Theater Installation

Whether you'd like to mount a flat-panel TV, program that universal remote you just bought, or install a wireless speaker system, the experts at Best Buy's Magnolia Home Theater can help. With their assistance, you can make the most of your home theater and tidy up your living space at the same time. For instance, hiding the appropriate cables is a standard part of wall-mounting services. Prices vary for different services, so we suggest making a list of what you'd like done and then checking rates at www.bestbuy.com/magnolia. This option will offer you a hassle-free way to take care of all your organizational needs at once. ●

your flat-panel TV. Another option many people prefer is to let the professionals handle the entire process. The experts at Best Buy's Magnolia Home Theater (www.bestbuy.com/magnolia) specialize in TV installations; see the "Premium Home-Theater Installation" sidebar for more information.

If you bought a lot of your electronic devices separately, you likely have more remotes than you know what to do with. Keeping track of multiple controllers can be time consuming and using them can complicate the simplest of tasks. A universal remote can simplify things and make switching from watching the evening news to listening to classical music a one-step process.

It's not hard to find a remote that will fit your individual needs. If you simply want to combine control for your TV and a few other devices, you can get by with a fairly inexpensive remote such as the One For All 8-Device Universal Remote URC-8820 (\$19.99; www.ofausa.com). With that said, the more you're willing to spend on a universal remote, the more devices you usually can control. Consider the Harmony 890 Advanced Universal Remote from Logitech (\$399.99; www.logitech.com). We love this remote's 100-foot range and that it can control

devices from any angle even when they're concealed behind cabinet doors or in the next room. You can also simplify the control of your entertainment devices with the Harmony 890's one-touch Activity buttons. For instance, the Listen To CD button will turn on and switch off the appropriate systems so you can listen to music with little effort. With a universal remote such as this one, you can eliminate extra remotes and hide your electronic devices from view.

Many of the cords associated with home-theater systems connect speakers to an HDTV. One way to avoid a tangled mess is to use a compatible wireless speaker system. For example, you can install the Panasonic SH-FX85's (\$199.99; www.panasonic.com) wireless speakers in up to four rooms and pipe the tunes from your iPod or any other MP3 player via the music port. In order to find the wireless system that works best for you, consider talking with a sales associate at your local Best Buy.

With some adjustments, you can tame your CE devices. And it's worth the effort, because while life may become hectic at times, your HDTV experience shouldn't. **PG**

BY TARA SIMMONS

Logitech Harmony 890 Advanced
Universal Remote
\$399.99 • www.logitech.com

If you have a flat-panel TV, you have the option of mounting it on a wall. While freeing floor space will make a room more open and inviting, mounting your LCD or plasma TV is no small feat. There are many mounting options to choose from, including recessed wall mounts, articulating wall mounts, ceiling mounts, and so on. Take the time to find the proper mount and factor into consideration the height and viewing angles you'll need for the environment in which you'll use

Your Home Theater Go-To Guys

Best Buy's MAGNOLIA Home Theater Premium Installation Services

Back in the day, setting up a TV was a cinch, but it's more complicated now. Best Buy's Magnolia Premium Home Theater Installation lets you sit back and envision your ultimate viewing and listening environment, while leaving the design, configuration, and installation to Magnolia's trained experts.

In-Home Consultation

Magnolia offers an in-home consultation service. Schedule an appointment by calling 1-888-MAGNOLIA (1-888-624-6654) or by visiting your local Best Buy and speaking to a customer specialist.

Magnolia's experts spend roughly an hour helping you build your dream A/V system. The experts perform a preliminary walkthrough of your home, discussing with you the possibilities and offering advice on choosing products that meet your needs. The cost of the service, which includes a detailed estimate of costs and a diagram of the proposed layout, is \$100. If you buy your equipment at Best Buy and spend more than \$499, you can apply the cost of your consultation toward the purchase.

In-store experience. Each Magnolia Best Buy features a Magnolia demo room, in which you'll see and hear what a high-performance home-theater setup should look and sound like in a comfortable living room-like setting. A Magnolia expert will ascertain what it is that you want from your home-theater system.

Available Services

Magnolia offers a range of flexible and comprehensive services to help you realize your ideal home-theater system.

- Consultation
- Delivery and setup
- TV mounting
- Speaker installation
- Universal remotes
- Extras

They'll also make sure you'll have the proper cables and accessories to make it work, as well as ensure you're informed about the product. For instance, if you purchase a new HDTV, the Magnolia expert can inform you about the local availability of digital cable, satellite, and over-the-air services.

In-home installation. Magnolia's basic TV And Video setup costs \$150 and includes the plugging in, configuration, and setup of video equipment. Add audio integration for another \$50, bringing the Home Theater setup to \$200. Other services, such as calibration, remote control programming, and stand assembly, are available, as well.

One-Stop Shop

You already know that you can get the products you want at Best Buy, and now you know that you can get it all

Price Breakdown

Magnolia offers a fairly complete list of professional installation services that feature a clear pricing scheme so you can make sure you get a system that fits your lifestyle and your budget.

- In-home system design and layout consultation: \$100
- TV And Video setup: \$150
- Home Theater setup: \$200
- Flat-panel TV and projector mounting
 - 20 inches and under: \$300
 - 21 to 32 inches: \$400
 - 33 inches and up: \$500
- Front projector: \$600
- In-wall speaker installation
 - One speaker: \$100
 - Three speakers: \$200
 - Five speakers: \$300
 - Up to seven speakers: \$400
- Universal remote programming
 - Harmony remote: \$150
 - Other universal remote: \$300

installed and configured to your liking with the help of Best Buy's Magnolia Premium Home Theater Installation service. Perhaps the most important aspect of the service is that Magnolia's experts will teach you to become the expert of your own home theater. **FG**

BY ANDREW LEIBMAN

HDTVs

5 Must-Have Accessories



1 Invariably, as you head toward the HDTV section of your local consumer electronics store, you'll walk right past shelves of bland-looking HDTV accessories. Sure, these accessories have multichannel audio, gold-plated connectors, nitrogen-injected insulation, and fully-articulating mounting arms, but they just can't compete visually with their big-screen, flat-panel HDTV counterparts. Despite outward appearances, however, there are a handful of accessories that are absolutely vital to getting the most from your HDTV.

1 HDMI cables. We're guessing your wife doesn't want bundles of wires and cords snaking around the living room, and nests of wires are attractive nuisances for your children and pets. HDMI cables are all-in-one cords that carry uncompressed digital audio and digital video signals to and from your HDTV and its components, eliminating the need for separate cords for video and audio. Acoustic Research's AP085 6-foot HDMI cable (\$99.99; www.araccessories.com) is the perfect accessory to pass your digital signals—nicely and neatly, of course—among your devices. Be sure to budget for this must-have.

2 Wall mount. Mounting your new HDTV on a wall will show it to its advantage, and a swivel mount will let you adjust the position of the television so you see it at its best viewing angle. A wall-mounted HDTV also gives you more floor space and keeps your living room or home theater neat and clutter-free. Before hanging the wall mount and installing the TV (let the pros at Best Buy's Magnolia Premium Home Theater Installation service help you out so you're sure the job is done right), make sure your couches and chairs are where you want them for a while so you don't have to drill new holes in the walls every time you rearrange the furniture.

3 Stand. If you'd rather not drill holes in your home's newly painted walls, or if you live in a condo and your walls are cement or cinderblock, a stand is a better option than a wall mount. Today's A/V furniture manufacturers offer gorgeous, showroom-style stands in a variety of materials, including warm wood (available in many stains), minimalist brushed steel, and clean-looking glass. You can get a triangular corner model, a high-backed cabinet that includes a mount for flat-panel HDTVs, and stands with shelves to accommodate the rest of your A/V gear.

4 Surround-sound system. We're willing to bet that you've struggled with keeping volume levels steady when you're watching something on TV. There's nothing more annoying than being startled by a loud commercial in the middle of your favorite show; likewise, nothing is more jolting than when a quiet, serene part of your favorite movie is suddenly interrupted by a too-loud scene change. Eliminate this by investing in a good-quality surround-sound system, which will prevent volume extremes by automatically equalizing the audio in movies and HD broadcasts that are capable of 5.1 or better surround sound.

5 Universal remote. Let's face it: No one—not your mom, dad, grandma, or even the kids—can figure out the remotes when there's a different one for each component in your home-theater system. Consolidate the controls for your various devices with a programmable universal remote, which lets you control everything with a single device. The Logitech Harmony 880 Advanced Universal Remote (\$249.99; www.logitech.com) lets you control 15 devices at once. Better still, you'll keep your living room clean and clutter-free. **PG**

BY ANDREW LEIBMAN

Buying An HDTV

Top 5 Things To Know

Buying an HDTV is a big decision. There are myriad options and no shortage of accessory choices. And let's face it—you're spending a whole lot of money. We'll help you wade through your choices and identify the five most important things to consider when shopping for the right set for you and your family.

1 Buy better cables. Very few home-theater components, including the most expensive televisions and DVD players, come with quality cables. Plan to spend an extra hundred dollars or so purchasing cables for the highest-resolution formats each device supports. HDMI, DVI, and

component cables are all HD-compatible options. HDMI, the newest HD interface standard, eliminates cord tangles with a single, slim cord that connects your DVD player or digital television receiver to your television. It also supports all high-definition resolutions (720p, 1080i, etc.) while maintaining a digital signal throughout the process. Whatever option you choose, don't buy the cheapest or shortest cable on the shelf. Low-quality construction invites electrical interference and unreliable connections, and the cables may not withstand normal wear and tear as well as more expensive ones.

2 Don't hang it yourself. In most cases, it's best to hire a professional to hang your HDTV. A successful wall mount on regular drywall requires the right bracket, a correct alignment to wall studs, and a reliable attachment between the TV and its bracket. Brick or cinderblock walls provide an even greater challenge. Most electronics retailers offer affordable installation services and usually guarantee their work. Unless you're willing to bet your big new investment on your carpentry skills, bring in the experts.

3 Make yourself at home. Unless your family room is of warehouse proportions with walls of shimmering TV sets, you may not get the most realistic impressions of HDTVs at the store, unless, that is, you take advantage of Best Buy and other retailers' efforts to recreate realistic home environments in some stores. Try to preview your prospective HDTV in realistic surroundings and bring some of your favorite movies to see how they look on your set before you buy.

4 Size it up. Finding a set that works in your room is a crucial part of your purchase. A small room and a couch near the TV means you should invest in a fairly small HDTV; a larger space with plenty of seating for friends and family requires a bigger screen. Use the three-to-five rule to calculate your optimal screen size. Measure the distance, in feet, from your TV's location to your viewing position. Multiply that number by three, and then by five. Those numbers represent the minimum and maximum screen sizes, measured in inches diagonally, for that space. For example, a 10-foot span from your TV to sofa will accommodate screens between 30 and 50 inches.

5 Color and calibration. There's more to brilliant, sharp pictures than screen resolution; color reproduction and calibration make a big difference, too. When you're in a store considering an HDTV, be sure the colors are consistently true to life. Blacks shouldn't appear gray, bright areas shouldn't wash detail away, and high-paced action scenes shouldn't have jagged edges. Calibration is another important factor to keep in mind; this will ensure your HDTV's settings will be far better than the showroom settings many televisions ship with. Most retailers offer professional calibration (such as Best Buy's Magnolia Home Theater Optimization package) that uses special equipment otherwise unavailable to consumers; in most cases, such calibration is your best bet. However, there are calibration DVDs that can walk you through the process yourself. **FC**

BY GREGORY ANDERSON



Plasma & LCD TVs

What's The Difference?



lat-panel televisions continue to top electronics shoppers' wish lists. However, plasma and LCD sets are based on two very different technologies, so knowing their advantages and disadvantages will help you make an informed decision about which to bring home. **FC**

BY BRIAN HODGE

Plasma

Pros

- Because plasma TVs are based on phosphorescent screen technology, their pictures most resemble those of tube TVs in terms of brightness, color depth and shading, and picture clarity.
- Plasma still has the edge over LCDs on contrast ratio (often as high as 10,000:1), black levels, and reproducing subtle color shadings, particularly in dim scenes.
- Pixel response is very rapid, so fast-moving imagery shouldn't blur.
- Plasma sets are generally more affordable in larger screen sizes—say, over 50 inches.
- Although this is a more subjective evaluation, many viewers find that plasma sets do a better job of scaling up lower-resolution standard-definition TV signals.

Cons

- Some plasmas consume more electricity and put out much more heat during use than LCDs.
- At higher altitudes (above 6,500 feet), lower air pressure can cause the set to produce a buzzing noise similar to a neon sign.
- Although it's less likely now than with older sets, plasmas (usually cheaper, low-quality models) can still be susceptible to burn-in from static images such as stock-ticker bars and video-game gauges.
- With sets of equivalent size, plasmas are much heavier than LCDs, which can affect plans for wall mounting, and they can also be harder for one person to move.

Plasma Is Best For:

- Movie buffs
- Sports fanatics
- Viewers shopping for a large set
- Viewers prepared to pay for professional installation

LCD

Pros

- LCDs run cooler and often require less power to operate than plasma TVs.
- LCDs use a screen coating that reflects little ambient light, so glare and washout aren't a problem even under bright lighting conditions.
- There's no chance of image burn-in.
- Many LCD TVs have PC-compatible connections so the set can double as a computer monitor.
- With a few exceptions, LCD is your main choice for sets 40 inches and under. Most new under-40-inch plasmas come from off-brands that may be more of a gamble than sets from the major names.

Cons

- Pixel response may be a tad slower than plasma, so fast-moving imagery might blur.
- New LCDs may have stuck pixels, which show up as bright pinpoints of light. And a hard rap on the screen may break crystals and leave a permanent dark spot.
- True blacks can be difficult to reproduce because the fluorescent backlight still shines through the pixel grid (although some of the newest models are starting to address this by turning off the backlight in select screen areas).
- After a few years of use, the aging backlight may shift color somewhat, forcing the user to recalibrate the set.

LCD Is Best For:

- Avid gamers
- Viewers with brightly lit rooms
- Viewers shopping for a smaller set
- Viewers who want to do their own no-fuss installation
- Computer users

HDTV Glossary

B alderdash! OK, HDTV jargon isn't *that* bad, but there are a few terms every shopper should know. Here's your cheat sheet.

aspect ratio—Put simply, it's the shape of the TV's screen. An HDTV has a wider picture than a traditional TV of the same vertical screen height. An HDTV has a 16:9 aspect ratio, meaning that if its screen were 16 inches wide, it would be 9 inches tall. A regular 4:3 TV screen would be only 12 inches wide at the same 9-inch height.

HDMI—High-Definition Multimedia Interface is a new type of cable connection. It can carry both high-resolution video and uncompressed, multichannel audio among HDTVs, home-theater systems, and other components. HDMI cables are pricy, but they maintain top picture and sound quality.

HD tuner—Some more expensive HDTVs have a built-in tuner for receiving local high-definition broadcast TV channels. Your TV doesn't need an HD tuner if you have cable or satellite service. Separate HD tuners and antennas are available for HDTVs without them.

interlaced—When an HDTV displays an interlaced image, as in 1080i or 720i resolutions, it really shows you every other horizontal line of a frame of video (called a field) at a time. Sixty times a second, the TV displays the other field of the frame, meaning the lines not shown in the previous field. Interlaced video can seem to flicker and cause moving objects on-screen to have blurred edges.

LCD—Like a notebook's screen, a liquid-crystal display HDTV uses a fluid crystal



substance to form pixels of color in front of a backlight. LCDs may not be able to match plasma TVs' deep black and gray areas, but they're lighter, sometimes less fragile, and considered easier to set up. LCDs also are catching up to plasmas in size and price and are expected to supplant them in the market.

plasma—Plasma TVs use a tiny tube of gas for each pixel. Electricity makes each pixel glow. Plasmas are still available in bigger sizes than LCDs and create deeper blacks and sometimes brighter colors. However, older or less expensive models can also suffer permanent screen damage if an unchanging image is displayed too long, such as a TV channel's stock ticker or parts of certain video games.

progressive scan—A TV showing a progressively scanned image, as in 1080p or 720p resolutions, displays a full frame of video (both odd-lined and even-lined fields) all at once. Progressive-scan

video looks sharper and doesn't flicker like interlaced images can.




projection—Some large-screen HDTVs offer low-priced alternatives to LCD or plasma by using projection technologies. These technologies vary, but all projection TVs throw light on a screen from the front or rear. This means they are a little to a lot bulkier than plasmas or LCDs, but some rear-projection sets have stellar picture quality.

viewing angle—No matter where you sit in front of an HDTV with a wide viewing angle, such as 170 degrees, its picture should look reasonably good. Test this before you buy.

widescreen—A TV or monitor that's wider horizontally in relation to its vertical height—typically with a 16:9 aspect ratio for HDTVs—than an older 4:3 display.




Which Type Of HDTV Is Right For You?





Plasma, LCD, and projection: These are the three main types of HDTVs from which you'll choose if you're in the market for a sleek, new set. Refer to our comparison chart below to see how the technologies stack up against each other.

What It Is	What It Means	Plasma	LCD	Microdisplay Rear Projection
Technology	Different types of HDTVs use different technologies; understanding each type can help make your decision easier	Plasma uses a network of cells, each filled with a gas mixture. When the gas is excited, it lights up, and the cells form the image on your HDTV.	Light is streamed through cells filled with a liquid-crystal mixture. When charged, the intensity changes, forming the image on your HDTV.	There are three main types of rear-projection microdisplay: DLP, LCD, and LCoS. All use a lamp to bounce light off a chip onto the screen.
Size	The screen's diagonal size	Up to around 63 inches	Up to around 52 inches	Up to 65 inches and beyond
Depth	The depth of the set as a whole	4 to 5 inches deep	4 to 5 inches deep	From around 16 to 22 inches deep
Wall mountable	Can be mounted with a special bracket	Yes	Yes	No
Color reproduction	The brightness, saturation, and black level of an HDTV are some of the most important considerations	Excellent brightness, color saturation, and black levels	Exceptional brightness; very good color saturation; black-level quality is improving	Exceptional brightness and color saturation; generally excellent black levels
Ideal room type	Some types of HDTVs fit better in certain rooms than others	Media rooms with various seating areas	Rooms with windows or other ambient light	Larger rooms with a little extra floor space
Cost	HDTV prices range quite a bit depending on the technology	Expensive, though much less so than two years ago	Expensive, but generally less than plasma	Relatively inexpensive
Perfect for		TV fanatic who values picture quality above everything else	Gamers who also love HDTV	Big-screen lovers on a budget
Coollest feature		Excellent response time for high action	In general, can also be used as a PC monitor	Exceptional value for size
				

Which LCD TV Is Right For You?




So you've decided to get an LCD TV. The next step is deciding *which* LCD TV to invest in. If you're like most people, you're probably looking at a set that's in the 40- to 46-inch range. If you do purchase one of these HDTVs, know that you should be able to sit 5 to 10.5 feet away from it to get the best picture. Refer to this chart for further help when shopping.






What It Is	What It Means	Philips 42PFL7432D	Samsung LN-T4661F	Samsung LN-T4665F
Size	The diagonal measurement of the TV's screen	42 inches	46 inches	46 inches
Dimensions (without stand)	Height x width x depth	27x41.2x4.6 inches	27.75x43.5x4 inches	27.25x46.25x4.5 inches
Weight (without stand)	How much the TV weighs	60.8 pounds	64.4 pounds	50 pounds
Native resolution	The image's sharpness is best when displayed at the native resolution; anything else must be converted	1080p	1080p	1080p
Viewing angle	The maximum angle at which the viewer can see the screen clearly	176 degrees	178 degrees	178 degrees
Inputs	Inputs let you connect your components to your TV	3 HDMI; 2 component; 2 S-Video; 3 composite; 1 USB	3 HDMI; 2 component; 2 S-Video; 2 composite; 1 PC	3 HDMI; 2 component; 2 S-Video; 1 DVI; 1 PC
Outputs	Outputs let information from the TV, usually audio, be transferred to peripherals, such as speakers	4 audio	2 audio	2 audio
Cooler feature		Front USB port makes transferring and viewing multimedia content a snap	Fast response time minimizes blurring of moving video	Super Clear Panel technology that reduces glare without compromising clarity
MSRP		\$1,799.99	\$2,799.99	\$2,999.99
		 8251358	 8251447	 8251508

	Sharp AQUOS LC-46D62U	Sharp AQUOS LC-46D82U	LG 42LB5D	Sony BRAVIA KDL-46XBR2	Sony BRAVIA KDL-46XBR3
	46 inches	46 inches	42 inches	46 inches	46 inches
	28.25x44.5x5 inches	29x44.75x5 inches	27x40.7x3.5 inches	29x49.75x4.75 inches	29x49.75x5 inches
	70.6 pounds	68.3 pounds	50.7 pounds	79.3 pounds	79.4 pounds
	1080p	1080p	1080p	1080p	1080p
	176 degrees	176 degrees	178 degrees	178 degrees	178 degrees
	2 HDMI; 2 component; 1 S-Video; 3 composite	3 HDMI; 2 component; 1 S-Video; 2 composite	3 HDMI; 2 component; 1 S-Video; 2 composite; 1 PC	3 HDMI; 2 component; 1 S-Video; 3 composite; 1 PC	3 HDMI; 2 component; 1 S-Video; 3 composite; 1 PC
	4 audio	N/A	2 audio	2 audio	2 audio
	Sleek, piano-black finish and recessed bottom-mounted speakers make it an ideal wall mount	Backlight System enhances and widens the TV's color spectrum	IPS technology prevents image blurring on fast-motion video at a remarkably affordable price	True HD resolution , the highest consumers can buy right now	True cinema-style picture with 1080p, Bravia light engine, and color enhancement
	\$2,299.99	\$2,999.99	\$1,999.99	\$3,299.99	\$3,599.99
					
	7992808	8251287	8258048	7941294	7997242

Which Plasma TV Is Right For You?




If you're planning on buying a plasma HDTV, it might be hard to decide on one just by looking at a wall of gorgeous sets. The most popular size of plasma TV is between 42 and 50 inches (and that's what we focus on below); as with most things in life, though, the bigger the better, so you'll find larger plasmas, as well. Refer to this chart for further help when shopping.






What It Is	What It Means	Insignia NS-42PDP	Panasonic TH-50PX75U	Hitachi P50H401
Size	The diagonal measurement of the TV's screen	42 inches	50 inches	50 inches
Dimensions (without stand)	Height x width x depth	26.5x49x3.5 inches	31.25x47.5x3.75 inches	32.1x48.9x5.25 inches
Weight (without stand)	How much the TV weighs	90.4 pounds	83.75 pounds	92 pounds
Native resolution	The image's sharpness is best when displayed at the native resolution; anything else must be converted	720p	720p	1080i
Viewing angle	The maximum angle at which the viewer can see the screen clearly	N/A	170 degrees	170 degrees
Inputs	Inputs let you connect your components to your TV	1 HDMI; 3 component; 1 S-Video; 2 A/V; 1 PC	2 HDMI; 1 component; 1 S-Video	3 HDMI; 2 component; 1 S-Video; 1 RF
Outputs	Outputs let information from the TV, usually audio, be transferred to peripherals, such as speakers	1 audio; 1 A/V	1 audio; 1 video; 1 A/V	2 audio
Cooler feature		The price —excellent for a 42-inch plasma HDTV	Gallery-Player SD memory card slot lets you view your digital images on a really big screen	Anti-glare glass and 1080i resolution combine to provide bright colors and detailed images
MSRP		\$979.99	\$2,099.99	\$2,099.99
		 7865465	 8254792	 8256638

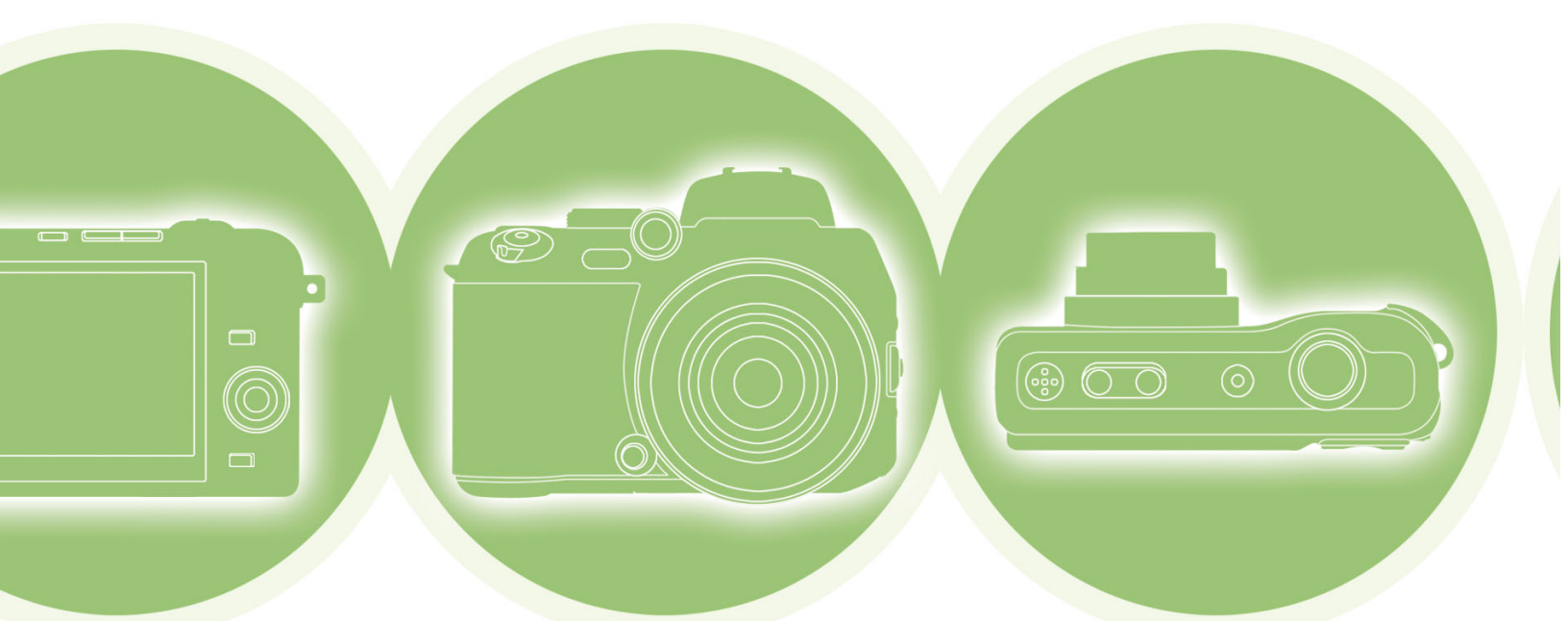
	LG 50PC5D	Pioneer Elite Pure-Vision PRO-FHD1	Pioneer PDP-4271HD	Pioneer PDP-5080HD	Samsung HP-T5054
	42 inches	60 inches	42 inches	50 inches	50 inches
	26.75x41x4.5 inches	34.7x57.9x4.7 inches	26.75x41x4.5 inches	31.3x48x4.25 inches	31x48.5x3.75 inches
	69.4 pounds	113 pounds	63.9 pounds	88.8 pounds	91.7 pounds
	720p	720p	720p	720p	720p
	160 degrees	160 degrees	160 degrees	160 degrees	175 degrees
	2 HDMI; 2 component; 2 S-Video; 2 PC; 1 RF	2 HDMI; 3 component; 2 S-Video; 1 PC	2 HDMI; 3 component; 2 S-Video	4 HDMI; 2 component; 1 S-Video; 2 RF; 1 USB	3 HDMI; 2 component; 2 S-Video; 2 RF
	2 audio; 1 A/V	2 audio; 1 subwoofer	1 audio; 1 video	2 audio; 1 video	2 audio
	XD Engine delivers well-contrasted images and bright, vibrant colors	Integrated Media Receiver with dual NTSC and ATSC tuners and CableCARD interface	CableCARD slot and TV Guide On-Screen	USB input and Home Gallery Photo Viewer , which let you show off your multimedia files to friends and family	Auto-pixel-shift technology that prevents picture burn-in
	\$2,299.99	\$5,999.98	\$1,499.99	\$3,499.99	\$2,099.99
					
	8254355	7976746	7854707	8378739	8254257

Which Microdisplay TV Is Best For You?

If you're in the market for a big HDTV, a rear-projection microdisplay model can give you a lot of bang for your buck. Here is a chart that compares eight 56- to 70-inch models, all available at Best Buy (www.bestbuy.com).

What It Is	What It Means	Mitsubishi WD-65733	Philips 60PP2900D37	Samsung HL-T6187S
Projection technology	Depending on the manufacturer, the TV will have DLP, LCD, or LCoS microdisplay technology	DLP	DLP	DLP
Size	The diagonal measurement of the TV's screen	65 inches	60 inches	61 inches
Dimensions (without stand)	Height x width x depth	39.5x58.2x15.7 inches	59.3x56.7x27 inches	37.5x54.9x15.25 inches
Weight (without stand)	How much the TV weighs	78 pounds	184.8 pounds	74.7 pounds
Native resolution	The image's sharpness is best when displayed at the native resolution; anything else must be converted	1080p	1080p	1080p
Inputs	Inputs let you connect your components to your TV	3 HDMI; 3 component; 2 S-Video; 2 RF	1 HDMI; 2 component; 1 S-Video; 4 composite	3 HDMI; 2 component; 2 S-Video; 2 RF; 1 PC
Outputs	Outputs let information from the TV, usually audio, be transferred to peripherals, such as speakers	2 audio; 1 video	1 audio; 1 optical digital audio	1 audio; 1 video
Cooler feature		HD capable antenna to receive OTA HD broadcasts	Integrated QAM receiver for increased brightness and clarity	Cinema Smooth film mode eliminates artificial frames that are created when films are converted to DVDs
MSRP		\$2,199.99	\$1,599.99	\$2,999.99
		 8320168	 8185386	 8293376

	Samsung HL-T5676S	Samsung HL-T6176S	Sony WEGA KDS-60A2020	Sony WEGA SXRD KDS-R70XBR2	Toshiba 65HM167
	DLP	DLP	LCoS (Sony's name for it is SXRD)	LCoS (Sony's name for it is SXRD)	DLP
	56 inches	61 inches	60 inches	70 inches	65 inches
	33.25x50.75x10.5 inches	36.75x55x12.25 inches	38.75x55.5x20 inches	46.25x68.75x24.5 inches	37x58x22 inches
	65.3 pounds	74.1 pounds	94.8 pounds	154.3 pounds	100 pounds
	1080p	1080p	1080p	1080p	1080p
	3 HDMI; 2 component; 2 S-Video; 2 RF; 1 PC; 2 composite	3 HDMI; 2 component; 1 S-Video; 2 composite; 1 PC	2 HDMI; 3 component; 1 S-Video; 3 composite	3 HDMI; 2 component; 1 S-Video; 3 composite; 2 RF	3 HDMI; 2 component; 1 S-Video; 2 A/V; 1 RF
	2 A/V; 1 video	2 A/V; 1 video	1 audio	2 audio	2 audio
	SRS TruSurround XT technology for an excellent audio experience	Brilliant Color II technology increases brightness and color intensity	Digital MPEG technology reduces ambient noise caused by compression	SXRD technology for excellent resolution, contrast ratio, response time, and production	Pixel Plus technology enhances every pixel for razor-sharp images and excellent detail and depth
	\$2,199.99	\$2,599.99	\$2,599.99	\$5,999.99	\$2,199.99
					
	8293839	8293777	8242109	8054758	8275706



Conserve Batt

cameras

Family vacations and long trips often result in two things: scads of pictures and hours of video. During these trips, you're always on the go, away from a power outlet to charge your camera or camcorder battery. As a result, you want to get the most life from the battery to ensure you always have enough juice to capture the next shot or video.

As we all know, battery life is limited. Sadly, some of the best features on a digital camera are also some of the most power-hungry features. Learning which features gobble power and knowing when to avoid using them can help ensure you have power when you need it.

Play I spy. If your camera has an optical viewfinder, use it. The LCD on the back of your camera provides a wonderful preview of your shot, but it also eats up battery life. Open the camera's control menu and look for an option to turn off the display.

Don't show off. One of the benefits of a digital camera is that we can see the pictures right away. That doesn't mean, however, that you *need* to show off all 200 pictures of your new puppy. Save your camera's battery by showing friends the pictures later. Of course, there are times when you need to review a picture to make sure you got the shot, but do so knowing that it will use battery power.

Use power-saving modes. Many digital cameras have power-saving features that will turn the camera off or put it into a sleep state when not in use. Activate this feature using your camera's menu system and set the time delay to the shortest interval possible. Also, turn off your camera if you know you won't be using it for a while.

Delete later. Memory card capacities have increased in recent years, enough so that many of us can afford a large card or a couple of smaller cards. As a

result, it's no longer necessary to delete the bad shots right away. Wait to delete unwanted photos until you're at your computer and connected to an outside power source.

Move your feet. The motors that control your camera's zoom use quite a bit of power. Many times, you can get the same, or sometimes better, shot by simply moving your feet and getting closer to your subject. A little bit of movement on your part can save power for other important shots later.

Take advantage of natural light. Generally speaking, natural light is more flattering than the light that comes from your camera's flash. If your camera is set to an auto-flash mode, you may be flashing pictures unnecessarily. The flash on your camera requires more power than you may think. In order to get better pictures and save power, turn off the flash when it's not needed.



every Life

Save Energy For When You Need It Most

camcorders

Like digital cameras, digital camcorders fall under the curse of limited battery life that seems to disappear all too quickly. Power-hungry features are often to blame for draining a camcorder's battery, just as is the case with digital cameras. In fact, many of the tips mentioned for digital cameras apply to camcorders, as well. Read on to discover more ways to maximize your camcorder's battery life.

See the moment. When possible, turn off your camcorder's LCD and use the optical viewfinder. This is especially true in sunny conditions where you can't really see the LCD anyway. If you must use the LCD, look for an option in the camcorder's menu system to turn off the backlight and conserve energy that way.

Review later. Reviewing video on your camera's LCD also uses quite a bit of power. Wait until later to watch the funny video you just recorded. You'll save power, and you'll get to enjoy the video on a

larger screen such as your TV or computer monitor.

Go for uniform movement. There's nothing worse than watching a shaky home video that jumps from scene to scene. Use a tripod to shoot like a pro and save energy in the process by turning off image stabilization features. Also, pause recording and move your feet to get closer to your subject instead of using the camcorder's zoom. Finally, if you're between shots and have some downtime, turn off the camcorder. Otherwise, avoid flicking it off and on repeatedly.

Edit later. Your camcorder may have editing features that let you add transitions and other cool effects between shots, but that doesn't mean you have to use them all the time. When battery life is a premium, save the editing for when you're at your computer.

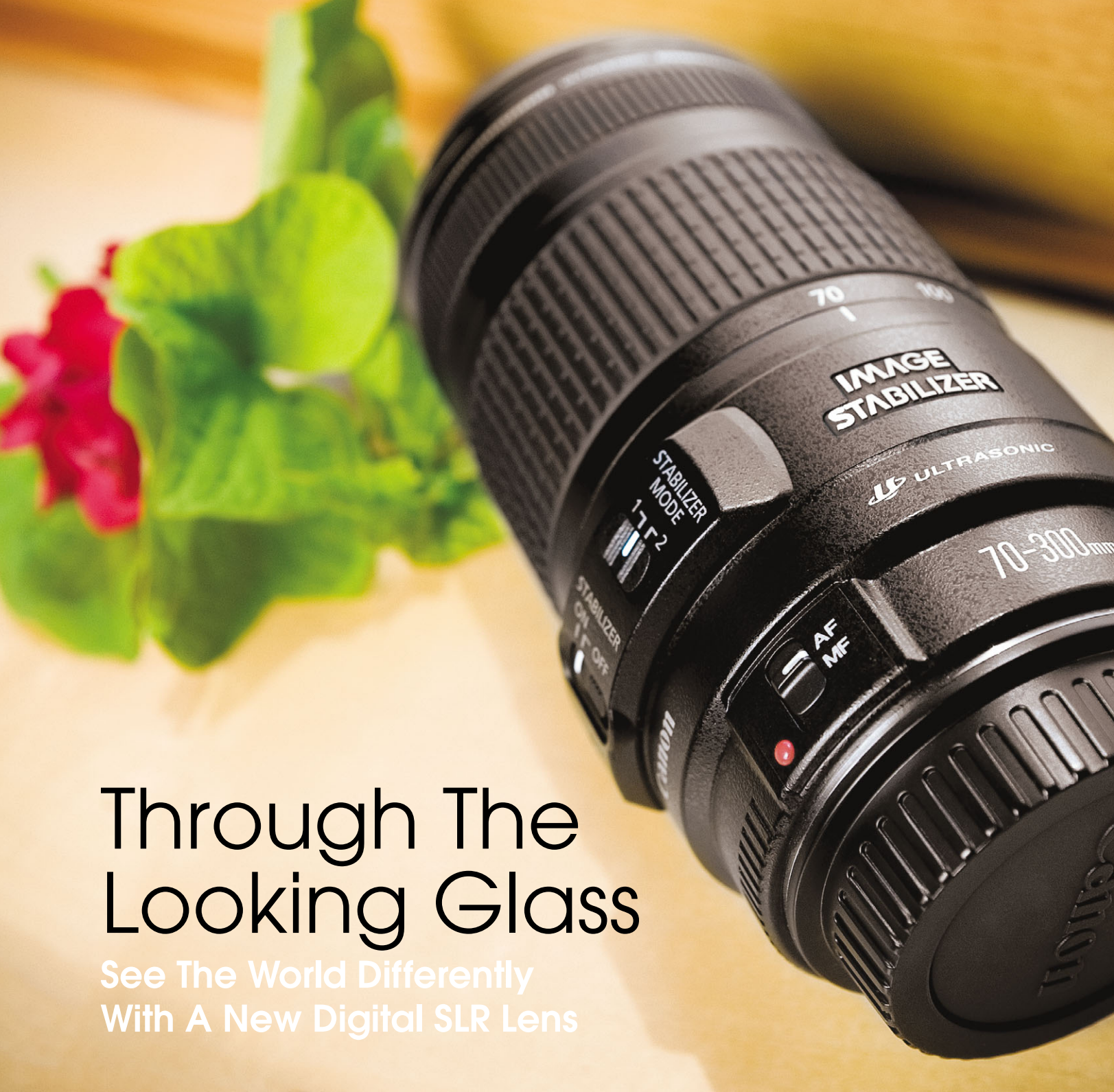
Beware of temperature changes. Electronics and extreme temperatures have always been at odds with one another. In fact, extreme

temperatures can affect your camcorder's battery and drain it faster than normal. As much as possible, avoid temperature extremes when using your digital camcorder.

Add more power. In addition to conserving battery life, it's especially helpful to have a spare battery for your digital camcorder. If your camcorder uses itself as a battery charger, consider buying an external charger along with an extended-life spare battery. This way, you can charge one battery while you're at the zoo in the morning and then swap out for a fresh battery in the afternoon before heading to the park.

Check the settings. Many camcorders have battery-saving features. Turn these features on, and make sure they match your personal preferences and shooting styles. Also, use night shooting modes and other special features sparingly as they consume quite a bit of power. **FC**

BY JENNIFER JOHNSON



Through The Looking Glass

See The World Differently
With A New Digital SLR Lens

Thanks to affordable prices and gentle learning curves, D-SLR cameras are increasingly popular alternatives to point-and-shoot compacts. They're popular in part because they allow room for growth: As you gain experience, you can broaden your creative range by investing in additional lenses. New lenses let you improve image quality and go beyond the technical

limitations of your original lens. For instance, you can greatly extend the reach of the Canon Digital Rebel XT's (\$699.99; www.usa.canon.com) 18-55mm kit lens with Canon's EF 70-300mm f/4-5.6 IS USM Telephoto Zoom Lens (\$649.99). Let's say you're shooting at a school football game. With the telephoto lens at 300mm, you can get more than five times closer to

the action than you could get with the original lens at 55mm.

Lens Types

The kind of shooting you want to do (close-ups, nature shots, landscapes, etc.) will determine the best lens for the job. A lens's focal length will usually tell you its specialty.

The **kind of shooting** you want to do (close-ups, nature shots, landscapes, etc.) will determine **the best lens** for the job.

Wide-angle (below 30mm). These broaden your field of view. Lenses below 20mm are often called super-wide-angles and may distort the edges of your image.

Macro. These let you get extremely close to small subjects such as flowers and insects.

Other Factors

A D-SLR lens communicates electronically with the camera body to exchange data about exposure, auto-focus, etc., so choose a lens that's fully compatible with your camera body. Your best bet will be a lens from the same manufacturer, designed to work with your camera body, although you may be able to find compatible lenses from third-party manufacturers.

Lens speed is a less widely understood consideration but is still important. It's simply the lens' widest possible aperture. Because a wider aperture admits more light, you can use a faster shutter speed. An f/4 lens, for instance, is fine for general shooting under adequately lit conditions and with still or slow-moving subjects, but if you need to shoot in dim environments, or freeze moving objects, you may want a faster lens, such as an f/2.8.

Whether you go wide or long, a new lens is one of the most useful accessories you can add to your D-SLR. **FG**

BY BRIAN HODGE

D-SLR Lens Terms

When searching for a new lens, you should be familiar with these terms:

Aperture. A component that widens and narrows to determine how much light enters the camera.

F-stop. The aperture's numerical setting; the lower the number is, the wider the aperture becomes, and the more light it admits.

Focal length. The distance between the center of the lens and the image sensor, in millimeters. The longer the focal length, the stronger the lens' magnification power is.

Image stabilization. A feature that compensates for camera shake.

Kit lens. A lens bundled with a body, usually entry-level quality.

Prime lens. A lens with a fixed focal length; although less flexible than zoom lenses, prime lenses often provide sharper quality. Think of a prime lens as a specialist. It does one thing—that is, one focal length—and does it well.

Zoom lens. A lens with an adjustable focal length. Having a range of focal lengths means you're more likely to get the exact picture you want, whether you're framing a wide-angle scene or a distant telephoto shot.

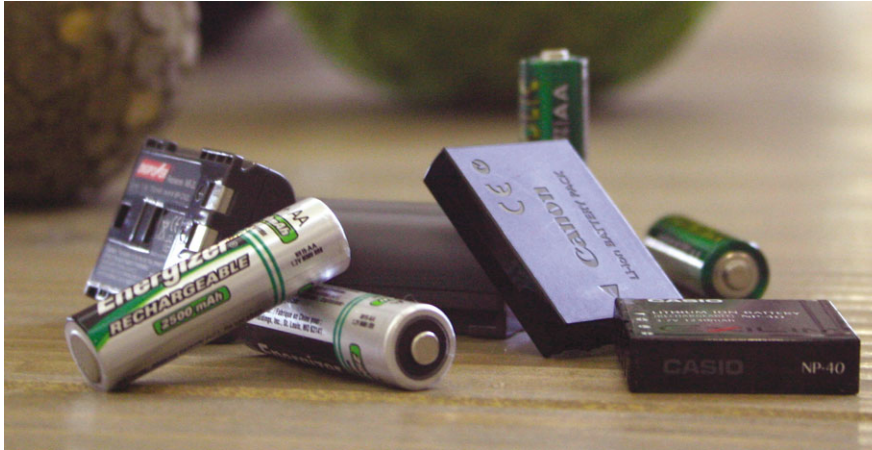
Canon EF 70-300mm f/4-5.6 IS USM
Telephoto Zoom Lens
\$649.99 • www.usa.canon.com

Telephoto (above 50mm). Telephoto lenses magnify objects, so you don't necessarily need to be close to your subject. Lenses above 200mm are often called super-telephotos.

Standard (30mm–50mm). In this range, especially around 50mm, the lens most closely matches the perspective of the human eye.

Power To The People

Understand Batteries For Digital Cameras



Want to make your first billion? Simple—invent a power source small enough to fit inside a digital camera that will constantly renew itself throughout the life of the digicam.

Until somebody does that, we're stuck with what we have now: juice-hungry cameras powered by batteries that seem to run out at inopportune times. Still, if you understand the differences between battery types, you can increase the odds of your camera being ready when you are.

What's Behind The Battery Cover?

A digital camera's power comes from either a proprietary rechargeable battery or one or two pairs of AAs. There are advantages and disadvantages to each setup:

With the proprietary option, the battery and its charger are included with the camera and should last for years. On the downside, after the battery is depleted, the camera is out of commission until the battery recharges, unless

you've bought a spare, which could run several dozen dollars.

With cameras that take AAs, you can buy batteries anywhere and always have inexpensive spares on hand. But for economy and convenience, you'll need to supply your own rechargeable batteries.

All Batteries Are Not Created Equal

Batteries may look the same on the outside, but what they're made of on the inside determines how long they'll last and whether they're right for the job.

Alkaline. Alkaline batteries are inexpensive, but they're ultimately suited for slow-current gadgets such as remote controls. They hold a lot of power, but they also have a high level of resistance, meaning they have a hard time delivering the amount of high-current power a digicam needs. This is why cameras exhaust alkaline batteries so quickly compared to other types.

Li-Ion (lithium-ion). If your camera comes with a proprietary rechargeable

battery, it's almost certainly a Li-Ion. These batteries charge fairly quickly and can hold most of the charge for weeks, even months, depending on how heavily you use the camera.

Lithium. Lithium AA batteries have the same chemistry as Li-Ions, although the slightly different name is often used for non-rechargeable batteries. (Rechargeable Li-Ion AA batteries aren't widely available in this country.) They pack a lot of power and last much longer than alkaline batteries. They also have a tremendous shelf life—upwards of 10 or even 15 years.

NiMH (nickel metal hydride). These batteries are currently the best option for rechargeable AAs. However, they steadily lose their charge even when not in use. If you leave your camera on the shelf for a month or two, it won't have much life the next time you use it.

NiCad (nickel cadmium). You may still find these available, but they've been rendered obsolete by NiMH batteries, which provide longer-lasting performance and are environmentally safer.

The Bottom Line

For a long-lasting battery, you can't beat a Li-Ion. If you invest in a spare, your shooting will likely never screech to a halt because of a dead battery.

If your camera takes AAs, get a set or two of NiMH batteries and charge them often. To be safe, pack a spare set of Lithiums and resort to alkalines only in emergencies. **FG**

BY BRIAN HODGE

Digital Cameras

5 Must-Have Accessories

Digital cameras capture the memories of events large and small in our lives, and the list of possible accessories is nearly endless. Here are five, though, that we find indispensable. **FG**

BY KATHRYN DOLAN

1 Memory Cards

There is nothing worse than running out of room in your camera or memory card for more pictures—especially when you're at a family gathering that's united six generations of your relatives. Different digital cameras have different memory card slots, so make sure you know what kind of card your camera takes. If you don't know, visit the Memory Cards & Sticks page on Best Buy's Web site and click the Memory Card Finder link. From there, you'll be prompted to select from drop-down lists your Device, the Manufacturer, and the Model, and a page of specs will pop up telling you not only what kind of media your camera takes, but also detailing the manufacturers and cards (and capacities) available for your camera.



2 Camera Case

You'll find bags and cases in all sizes and with all levels of protection. If you're driving across town to your brother's graduation, you may want a bag that'll hold a few accessories, too. Make sure the bag you want has pockets so you can tuck in a spare memory card, another lens, and extra batteries. As you tote your digital camera on a rock-climbing trip, look for a sturdy bag with a good deal of padding. If you're planning to fly, you might want a bag with a removable shoulder strap because you'll likely have to take it off if you check the bag. And when you finally take that photo trip snorkeling along the Molokini Crater and want to capture images in this underwater sanctuary, you'll need waterproof housing for the camera. Know that waterproof cases are designed for specific cameras; one size does not fit all.



3 Tripod



If you have loads of family pictures but you're not in any of them, it's time to get a tripod and join the group. The original Joby Gorillapod (\$21.95; www.joby.com) supports point-and-shoot digital cameras that weigh up to 9.7 ounces, and it has flexible legs with grips, so you can wind the legs around stair rails and other odd shapes if there's no flat surface available.

4 Photo Printer

The beauty of a digital camera and photo printer combo is that you end up printing only those pictures you really want to keep. You don't have to print those spooky-looking photos of your red-eyed cat or the accidental pictures of your finger. With PictBridge-compatible printers, you won't have to offload your pictures onto your computer before printing them, either, unless you'd like to edit them first.



5 Power Supply

Whether your camera takes AA batteries or rechargeables, make sure you have an adequate supply so you don't miss photo opportunities as a result of dead batteries. If you have rechargeable batteries, make sure your camera case (or carry-on) has enough room for your charger, too. When you're traveling overseas, check the power supply

in the country you're visiting and make sure you have the adapters necessary for your charger, too, so you don't accidentally fry it. Tuck

in an extra set of AA batteries for your point-and-shoot camera, although you'd be hard pressed to find a destination too remote for a store that stocks AA batteries.



Digital Cameras

Top 5 Things To Know



Digital camera prices have dropped dramatically in the last few years, but that doesn't mean buying your first—or even second—digital camera is an insignificant investment. Here are some important things to keep in mind as you shop; they'll help you make informed decisions when choosing a digital camera.

1 LCD Size

What is the size and resolution of the LCD? Although a 2-inch LCD is perfectly usable, most digital cameras are equipped with 2.5-inch or even 3-inch LCDs, which generally make it easier to compose a shot, read camera menus, and review images. On the downside, larger LCDs will drain batteries faster than smaller ones. Also check the LCD resolution in pixels; 115,000 is usable, but generally 235,000 is sharper.

2 Optical Zoom Range

What is the optical zoom range of the lens? Remember, pay attention to optical zoom range only; don't count the digital zoom, which does nothing more than crop the image to make it appear "closer" and may degrade image quality. A zoom goes from wide angle, which is good for landscapes, to telephoto, which is good for photographing distant subjects. Although most point-and-shoot cameras offer limited options in wide angle, there are many choices

for telephoto. Choose a zoom that best fits your needs.

3 Print Sizes

How many megapixels does the camera have, or, more importantly, what is the largest size print that can be made from that camera? More megapixels doesn't necessarily mean you'll get better pictures, but a camera's megapixel count does affect how large you can print an image. If you don't plan on making large prints, then getting a camera with extra megapixels will be a waste of money and storage space (more megapixels mean larger file sizes, which will fill up your media card more quickly). To determine how many megapixels you need, figure out how large you want to print your images. The rule of thumb is to multiply the dimensions (in inches) of the print you'd like to make by either 300ppi (pixels per inch) or 200ppi. The ppi indicates the print resolution of the image, and either 300ppi or 200ppi will produce a good print. To make an 8x10 print at 200ppi, you'll need a file that measures 1,600 x 2,000 pixels or a 3.2MP camera (1,600 x 2,000 = 3,200,000). Using the same math, the ideal camera resolution for an 8x10 print at 300ppi is 7.2MP.

4 Battery Requirements

There are two things to keep in mind when it comes to batteries: battery type and battery life. Many digicams use proprietary, rechargeable Li-Ion batteries and

come with a charger, whereas other cameras include one-time use AA batteries. While AA batteries are ubiquitous, alkaline and other nonrechargeable batteries will need to be discarded and replaced. A more economical, environmentally-sound solution is to use NiMH rechargeable AA batteries and a charger. Your camera's battery life is generally rated according to CIPA (Camera & Imaging Products Association) standards, which will give you the average amount of photos you can shoot on one charge. CIPA ratings can be found on manufacturer Web sites, and the higher the rating a camera has, the better.

5 Media Card

What type of media card does the camera use? Most digital cameras—including sub-\$1,000 digital SLRs—use SD cards, which come in different capacities and speeds. The number of images you can fit on a card depends on the camera's megapixel count and the resolution or quality level you select when shooting. Determine the maximum number of images you want to put on the card; that will help decide what capacity card you need. Also, find out if the card is SDHC (Secure Digital High Capacity)-compatible and will work with high-capacity (4GB) SD cards. Only cameras with an SDHC designation (available on most manufacturers' Web sites) are capable of using a card with more than a 2GB capacity. **FC**

BY THEANO NIKITAS

Digital Imaging Glossary



Confused about what certain terms on that camera box mean? Use this glossary to help decode the world of digital photography.

aperture—An iris-like diaphragm opening that can expand and contract the lens opening to let you control the amount of light that passes through it, thus affecting the exposure. The term “f-stop” is used interchangeably with aperture.

burst mode—Where the camera can take several shots (up to 10) consecutively, usually in one second.

CCD—Charge-coupled device, which is the camera’s image-sensing component. It converts light into energy that can be stored as digital data on your camera.

depth of field—The area of a photo that is in focus.

digital zoom—Magnifying an image digitally by cropping it and filling in the rest with interpolated pixels, thus degrading the quality. Even though the numbers seem impressive, never choose a camera based on digital zoom.

f-stop—See aperture. Smaller f-stop numbers mean a wider lens opening; larger f-stop numbers mean a narrower lens opening.

ISO—For digital cameras, the ISO setting measures the sensitivity to light (similar to how it does with film). Digital camera ISO settings, such as 200, 400, etc., should capture photos as if one were using film with such a speed.

Lower ISO settings mean you need more light, and vice versa.

LCD—The screen on the back of the camera that lets you see a live-action view of your subject, your photo after you’ve taken it, or both.

lens—The apparatus on the front of the camera that gathers and directs light towards the imaging device. In a digital camera, the lens probably has both an optical zoom and digital zoom.

megapixel—Approximately 1 million pixels. The higher the megapixel count, the higher the resolution and the more you can crop, which means (in general) better-quality photos.

memory card—Because digital cameras have very little onboard memory, they need a flash memory card to store more than a dozen or so images. The type of memory card you need depends on your camera make and model. Some of the most popular memory cards are Secure Digital, MultiMediaCard, Compact Flash, and Sony Memory Sticks. In general, memory cards are quite small.

noise—The small statistical variations among pixels that lead to (usually) minor distortions of color in a photo.

optical zoom—The ability to move the lens physically closer to your subject. With optical zoom, the higher the number (such as 5X or 10X), the better. When choosing a camera, always consider the optical zoom, not the digital zoom.

resolution—The number of pixels in an image. The higher the resolution,



the more detail and quality in a photo. Resolution is measured in a proportion (such as 2,272 x 1,704).

shutter—A mechanism that opens and closes to allow light to pass through the lens. You can usually control the shutter’s speed.




shutter speed—The length of time a camera’s shutter is open to let light through the lens to hit the sensor, which records the image. This is expressed in fractions of a second: For instance, a shutter speed of 1/250 means that the shutter speed is 1/250th of a second.

viewfinder—The small opening in the camera that the user looks through to frame a shot. Some digital cameras don’t have a viewfinder; instead, use the LCD to frame the shot.

white balance—Light levels are adjusted electronically to ensure whites (and thus other colors) are pure, leading to more lifelike color. White balance can usually be manually adjusted, too.

Which Camera Is Best For You?

If you're a little confused about the most important features in a digital camera, you're not alone. In this chart, we compare features from select digital cameras available at Best Buy (www.bestbuy.com), and we also explain what these features mean. If that still has you cross-eyed, we recommend models for certain lifestyles.

		Compact		
What It Is	What It Means	Canon PowerShot SD850IS	Kodak EasyShare V803	Olympus Stylus 770 SW
Resolution	In general, more pixels mean bigger, clearer prints	8MP	8MP	7.1MP
Optical zoom	Moves the lens physically closer to your subject	12X	3X	3X
Memory card	Removeable card that stores your photos in your camera	SD/SDHC/MMC	SD/MMC	xD-Picture Card
LCD size	The LCD is the display on the back of the camera	2.5 inches	2.5 inches	2.5 inches
Battery life	Based on how many shots you can take on a single charge	230 AA Alkaline; 470 AA NiMH	200 images	N/A
ISO	Light sensitivity; the higher the ISO, the greater the ability to take photos in low-light situations	Auto; High ISO Auto; Manual: 80, 100, 200, 400, 800, 1,600	Auto; Manual: 80, 100, 200, 400, 800, 1,600	Auto; 80, 100, 200, 400, 800, 1,600
Print sizes up to (at 240ppi)		10x13 inches	10x13 inches	8.5x11 inches
Perfect for		Creative photographers who are not quite ready for a D-SLR model	Anyone looking to invest in her first digital camera	Users who want to take pictures of their friends when they're swimming with the fishes
MSRP		\$499.99	\$199.99	\$379.99
				
		8297513	8257502	8278516




D-SLR


	Panasonic Lumix DMC-FZ8K	Sony Cyber-shot DSC-T100	Canon Digital Rebel XTi	Nikon D40	Olympus Evolt E-510
	7.2MP	8.1MP	10.1MP	6.1MP	10MP
	12X	5X	EF-S 18-55mm f/3.5-22*	18-55mm f/3.5 - f/5.6 ED II AF-S DX Zoom-Nikkor lens*	2 Zuiko Digital zoom lenses*
	MMC/SD/SDHC	Memory Stick Duo/PRO Duo	CompactFlash	SD/SDHC	CompactFlash/Micro-drive/xD Picture Card
	2.5 inches	3 inches	2.5 inches	2.5 inches	2.5 inches
	380 images	340 images	300 images	470 images	650 images
	Auto; Manual: 100, 200, 400, 800, 1,250, 3,200	Auto; Manual: 100, 200, 400, 800, 1,600, 3,200	Auto; Manual: 100, 200, 400, 800, 1,600	Auto; Manual: 200, 400, 800, 1,600	Auto; Manual: 80, 100, 200, 400, 800, 1,600
	9x12 inches	10x13 inches	10x16 inches	8x11 inches	10x16 inches
	Users who want a full-featured, yet affordable, digital camera	On-the-go camera enthusiasts with a keen sense of style	Confident camera users experienced with using D-SLRs	A newbie to the D-SLR arena	D-SLR users who want a good balance of auto and manual controls
	\$349.95	\$399.99	\$899.99	\$599.99	\$999.99
					
	8378007	8223362	7989901	8139169	8359046

*These lenses are for D-SLR cameras, and thus, there's no established equivalent to optical zoom. Talk to your Best Buy Digital Imaging specialist for more information.

Which Digital Camcorder Is Right For You?




Digital camcorders come in a number of formats: DVD, hard drive, MiniDV, and high definition are the most common. By comparing the following digital camcorders available at Best Buy (www.bestbuy.com), you can determine which format and product best fit your style.

What It Is	What It Means	DVD		DVD/HDD
		Sony 1.0MP Handy-cam DCR-DVD308	Canon DC220	Hitachi 30GB DZHS500A
LCD screen size	Diagonal length of viewing screen	2.7 inches	2.7 inches	2.7 inches
Optical zoom	The number of times the lens can enlarge or reduce the field of view; the better type of zoom	25X	35X	30X
Digital zoom	The number of times the camcorder can magnify a portion of an image; may result in loss of resolution	2,000X	1,000X	1,000X
Recording speeds	The type of speed and (if available) maximum amount of time that can be recorded in each	HQ: 20 min.; 35 min. SP: 30 min.; 55 min. LP: 60 min.; 110 min. (single; double)	XP: 20 min. SP: 30 min. LP: 60 min. (single layer)	XTRA: 6 hours FINE: 11 hours STD: 22 hours (to hard drive)
Memory card	Type of flash memory cards compatible with the camcorder (cards not included unless noted)	Memory Stick Duo	miniSD	SD
Digital still resolution	The number of megapixels the camcorder can capture in still images	1MP	6.8MP	3.3MP
Lines of resolution	Number of lines of horizontal resolution; the higher the number, the greater the detail	520	768	480
Weight	Weight of the camcorder (without battery, unless noted)	1 pound	14.2 ounces	1 pound
Perfect for		Novices who want to learn on a loaded camcorder	Home movie enthusiasts	Those who want to record in large blocks of time
Coolest feature		Shoot in 5.1-channel surround sound	Onboard editing software lets you rearrange footage	No need for a separate PC to record video to as many DVDs as you want
MSRP		\$499.99	\$449.99	\$799.99
				
		8207745	8223308	N/A

	Hard Drive		MiniDV	MiniDV/HD	High-Def
	JVC 30GB GZ-MG555	Sony 30GB DCR-SR42	Canon ZR-850	Panasonic PV-GS320	JVC HD Everio GZ-HD7
	2.7 inches	2.7 inches	2.7 inches	2.7 inches	2.7 inches
	10X	40X	35X	10X	10X
	1,000X	2,000X	1,000X	700X	200X
	Ultra: 7 hours FINE Norm Eco: 37.5 hours	HQ: 7 hours SP: 10 hours LP: 20 hours	SP: 80 min. LP: 120 min.	SP LP	HQ-VBR LT-VBR CBR
	SDHC/SD	Memory Stick Duo and Pro	SD/MMC	miniSD	SD
	5MP	3.4MP	1.07MP	3.1MP	2.1MP
	540	500	864	1,080	1,080
	14.4 ounces	13 ounces (with battery)	13.4 ounces	1.2 pounds	14.4 ounces
	Those wanting a lightweight, long- recording camera	Those who want to edit their movies on their PC	Those looking for an affordable, compact model	Anyone looking for a tiny but reliable camcorder	Anyone who loves high def
	Auto Illumi-Light brightens your subject in low-light situations	Included Handycam Station enables one- click disc burning	Three zoom speeds that ensure steady zoom and pan shots	Optical Image Stabilizer keeps im- ages steady and dis- tortion-free	The ability to play back video in true high definition
	\$899.99	\$599.99	\$329	\$499.95	\$1,699
					
	8224968	8211534	8212249	8216389	8225066

Which Photo Printer Is Right For You?

If you print digital photos at home frequently, or would like to, then a dedicated photo printer may be a better option than an all-in-one. Photo printers at Best Buy (www.bestbuy.com) offer a variety of features in a wide range of prices.

What It Is	What It Means	Epson PictureMate Snap	Epson Stylus R800	Kodak EasyShare 5500 All-In-One
Photo print speed	How fast it can print one image	45 seconds (4x6)	45 seconds (5x7)	28 seconds (4x6)
Resolution	Dots per inch (or dpi)—the more, the better	5,760 x 720	5,760 x 1,440	N/A*
Ink cartridges	How many cartridges the printer uses	1	8	8
Paper sizes	Sizes of paper compatible with the printer	4x6	Letter, legal A4, statement, executive, custom, 4x6, 5x7, 8x10, panoramic, and more	A, A4, 3x5, 4x6, 4x8, 4x12, 5x7, 6x9, 8x10, 11x14
PC-free printing	The ability to print images directly from camera	Yes	No	Yes
Memory card	Type of memory card the computer can accept and recognize	CompactFlash, SD, SDHC miniSD, MMC, Memory Stick, and more	No	CompactFlash, SD, MMC, Memory Stick, Memory Stick Pro, xD-Picture Card, Microdrive
Wireless connectivity	The ability to communicate with other peripherals with no wires	Yes, with optional Bluetooth print adapter	No	Yes, with optional adapter
Dimensions	Height x width x depth	5.7x8.5x6 inches	7.8x19.5x12.1 inches	11.3x18.8x16.4 inches
Perfect for		On-the-go photographers	Scrapbookers	Home offices that need to print a few photos
Coollest feature		Can operate on rechargeable battery (not included)	Included holder for printing on paper rolls	One-click printing from memory card
MSRP		\$149.99	\$399	\$299.99
		 7955359	 6389561	 8250288

*Kodak no longer provides resolution data for printers and says numbers alone can be misleading in terms of how resolution affects print quality.

	Lexmark X9350	Canon PIXMA Photo Printer iP09V	Canon PIXMA Photo Printer Pro9000	HP Photosmart Portable Photo Printer A617	Kodak EasyShare 5300 All-In-One
	22 seconds (4x6)	81 seconds (4x6)	30 seconds (4x6)	39 seconds (4x6)	28 seconds (4x6)
	4,800 x 1,200	4,800 x 1,200	4,800 x 2,400	4,800 x 1,200	4,800 x 1,200
	4	2	8	1	2
	A, A4, 3x5, 4x6, 4x8, 4x12, 5x7, 6x9, 8x10, 11x14, and more	Letter, legal, credit card, 4x6, 5x7, 8x10, #10 envelopes	Letter, legal, 4x6, 4x8, 5x7, 8x10, 13x19, #10 envelopes	4x6, 4x6.5, 4x8, 5x7, 4x12	A, A4, 3x5, 4x6, 4x8, 4x12, 5x7, 6x9, 8x10, 11x14
	Yes	Yes	Yes	Yes	Yes
	CompactFlash I & II, Microdrive, SD, MMC Sony Memory Stick and Memory Stick Pro, xD-Picture Card, and others with adapter	No	No	CompactFlash, SD, MMC, Memory Stick/Duo, xD-Picture Card, plus miniSD with optional adapter	CompactFlash, SD, MMC, Memory Stick, Memory Stick Pro, xD-Picture Card, Microdrive
	Yes	Yes, with optional Bluetooth print adapter	No	Yes, with optional Bluetooth print adapter	Yes
	10.6x18.3x15.1 inches	7.3x16.9x12 inches	7.6x26x14 inches	5.1x9.9x4.6 inches	8.8x18.8x14.7 inches
	Networked home-office with photo printing needs	Those who want a small, portable photo printer	Serious photographers	Those wanting quick fixes for image problems	A home office user on a budget
	Wireless printing (802-11g /b)	IrDA interface lets you print cell phone pictures	Supports wide variety of paper types, including fine art	HP Photo Fix button for automatic corrections	Photo prints cost around 10 cents with Kodak Value Pack (not included)
	\$279.99	\$249.99	\$499.99	\$129.99	\$199.99
					
	8339452	8254676	8030631	7893862	8250304

Multimedia Anywhere

Digital Convergence Brings The Computer Room Into The Living Room

Remember the good old days? The days when showing someone digital photos required a trip to the computer room? When listening to digital audio equaled throwing on some headphones and firing up your iPod, and when movie time meant sitting in the living room and hoping that the DVD you rented wasn't covered with scratches? We are happy to inform you that those days are over, courtesy of inexpensive and surprisingly versatile wireless home networking hardware.

A wireless home network is like a matchmaker for all your multimedia devices. Digital audio, video, and pictures are just computer files, and getting computer files from one device to another as conveniently as possible is a wireless network's specialty. At minimum you'll need a wireless router, which serves as the central point of contact for all networked devices and makes sure data goes where it needs to go. Because some multimedia files (especially videos) are large, we recommend buying a router, such as the Netgear RangeMax Next Wireless-N Router Gigabit Edition WNR854T-100NAS (\$139.99; www.netgear.com), that uses a proprietary version of the upcoming 802.11n wireless networking standard and that also supports the widely-used 802.11g standard. 802.11n is faster and more reliable than the 802.11g, 802.11a, and 802.11b standards that preceded it and is suitable for transferring high-definition video files that those older standards often can't handle. Although 802.11g is much slower relative to 802.11n, it is still fast enough to handle audio files, digital pictures, standard-definition video, and even high-resolution

video in some cases. It is also compatible with nearly every wireless network device that is designed to deliver multimedia content over a wireless network.

You'll need additional wireless hardware at the other end of the connection, but we'll discuss that when we tell you how to use wireless technology to tackle the following all-too-common scenarios:

Situation: You've bragged to everyone at the party about all the cute digital pictures and digital videos you have of your adorable kids, and now everyone wants to see them.

Old Way: Huddle around a computer monitor and squint.

Wireless Way: Kick back in the living room and wow your guests with larger-than-life stills and high-quality video on your massive HDTV.

Here's How: This trick requires what is often called a media extender, which is a device that connects to a TV or stereo system and delivers multimedia content that is stored on your computer's hard

drive. A good example is the 802.11g-based D-Link MediaLounge DSM-520 Wireless High-Definition Media Player (\$249.99; www.dlink.com), which handles a variety of digital audio and music formats, including high-definition video feeds. Just connect your PC to a wireless router that supports 802.11g, connect the DSM-520 to your HDTV or surround-sound receiver using the HDMI or component connection, and you can enjoy every multimedia file stored on the computer on your home-theater equipment. The DSM-520 even plays Internet radio stations.

The DSM-520 uses proprietary technology, but there is a standard called DLNA (Digital Living Network Alliance) that lets compatible devices interoperate with one another with minimal muss and fuss. For instance, the Buffalo Technology TeraStation HS-DH1.0TGL/R5 Storage Server (\$699; www.buffalotech.com) is a DLNA-certified media server that delivers multimedia content to any DLNA-compatible media player with minimal setup hassles. Products with DLNA support built-in included HDTVs, boomboxes, computers, and audio receivers,

so keep an eye out for the DLNA logo when shopping. You can learn more at the DLNA Web site (www.dlna.org).

Situation: You created the perfect digital music mix for your party, and it's playing in the living room, but now everyone's moving outside to enjoy the beautiful weather.

Old Way: Listen to the crickets and the sounds of your own voices.

Wireless Way: Stream the mix to any part of the house, inside or outside, using a Sonos ZonePlayer system.

Here's How: If you want your guests to listen to more than crickets chirping on a warm summer's eve, be sure to set up a Sonos ZonePlayer ahead of time. You can easily stream any music stored on your PC across the wireless network to up to 32 different rooms in the house—or to the backyard if necessary. The system is completely modular, consisting of the nonamplified ZonePlayer 80 (\$349; www.sonos.com) designed to connect to existing stereo systems, the amplified ZonePlayer 100 (\$499) that independently powers a pair of speakers (not included), and Sonos Controllers (\$399) that let you manage your audio

collection from anywhere within the range of the wireless network. Attach at least one ZonePlayer to your router and then strategically position additional ZonePlayers throughout the house and in the yard to achieve full coverage—you are limited only by the range of your home network. The system also plays Internet radio stations, and you can attach CD players, MP3 players, and other audio devices to one ZonePlayer to stream the music to all of the other players. Party on! **PC**

BY TRACY BAKER



D-Link MediaLounge DSM-520
Wireless HD Media Player
\$249.99; www.dlink.com

What Type Of Printer Is Best For You?

Meet Your Lifestyle's Needs



Kodak EasyShare 5500
\$299.99
www.kodak.com

When shopping for a printer to use in your home office, choosing between an inkjet, laser, or photo printer can be a tough call. Each type is suited for different purposes, and you'll need to know which type of printer is the best fit for you. Whether you primarily print out digital photos, papers for school, business documents, or a bit of everything, we'll help you settle on the right printer for your home office.

Business Quality

Whether you're printing research papers or business charts, your documents need to appear crisp and legible. On standard office paper, laser printers typically generate sharper text and graphics than inkjet printers, as ink tends to spread when it's absorbed by

the paper. However, most laser printers print only in black and white, which makes them less than ideal for printing photos. Color laser printers are available and more affordable than they used to be, but you can expect to pay between \$250 and \$600 for one.

Print Everything

Many home offices need a printer that can print everything from photos and scrapbook page layouts to documents and financial statements. Unlike laser printers, nearly all inkjet printers can print in both color and black and white. Best of all, many inkjet printers are available for less than \$100. The primary drawback to inkjet printers is the use of ink cartridges that can cost as much or more than the printer and typically yield between only 300 and 700 pages.

Photo Considerations

Standard inkjet and some color laser printers can produce decent-looking photos, but if you want lab-quality prints, you need a photo-quality printer. Some photo printers use technology that works only with specific photo paper and can print only photos. Therefore, if you need to print photos as well as standard, office paper-sized documents, you'll need to purchase a photo printer that does both. Additionally, you'll use much more ink printing photos than documents. If you only occasionally print photos, it may be more cost-effective to send your photos to an Internet photo printer, such as Best Buy's Photo Center @ Kodak Gallery (bestbuy.kodakgallery.com).

A Jack Of All Trades

Besides a printer, many folks who work in a home office also need a fax machine, a copier, and a scanner. An MFD (multifunction device) combines these peripherals into a single device, making it ideal for a home office with limited space. Note that MFDs are available in either laser or inkjet models.

But Which One Is Right For Me?

To narrow down which type of printer fits your lifestyle, read the following examples for Emily, Peter, Jacob, and Sarah. We found a few models that are ideal for each person's situation. **FG**

BY NATHAN LAKE

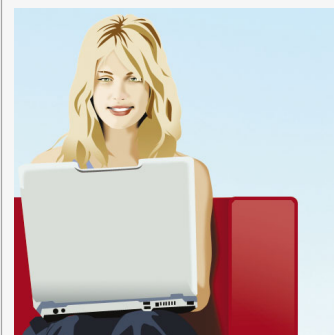


Emily, Stay-At-Home Mom

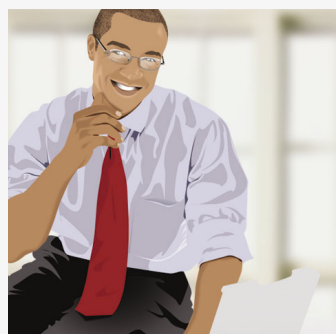
Emily needs to print photos of her kids, copy personal finance records, and scan recipes into her computer. To conveniently do so, Emily needs an inkjet MFD. The Kodak EasyShare 5500 (\$299.99; www.kodak.com) features a dedicated 4x6 photo paper tray as well as an 8.5- x 11-inch paper tray, so Emily won't need to switch the paper each time she prints a photo or document. Because Emily's household has multiple computers connected on a network, a model that features network connectivity, such as the HP Photosmart C5180 All-in-One (\$199.99; www.hp.com) or Brother MFC-440CN (\$149.99; www.brother-usa.com), lets Emily share the printer with the kids.



Sarah, College Student



Sarah prints out school papers and material from her online research nearly every day. A monochrome laser printer can provide crisp-looking text without breaking her budget, and one that monitors its own toner level, such as the HP LaserJet 1020 (\$199.99; www.hp.com), helps ensure that Sarah buys a replacement cartridge before the printer runs out of toner (which will inevitably happen the night before a term paper is due). Because Sarah lives in a dorm room, a compact laser printer that can squeeze into a small space, on a desk or shelf, is handy. The Brother HL-2040 (\$119.99; www.brother-usa.com) and Lexmark E120n (\$149.66; www.lexmark.com) are both affordable and small.



Peter, Business Owner

Peter needs to make copies, receive faxes, and scan business contracts. A laser MFD is ideal. Models that can handle envelopes, transparencies, labels, and card-stock, such as the HP LaserJet 3050 All-in-One (\$299.99; www.hp.com), let Peter print on a variety of business material. Because some contracts are printed on legal-size paper, Peter may require a MFD that features a legal-size document scanner, such as the Brother MFC-8460N (\$399.99; www.brother-usa.com).

Jacob, Family Man

Jacob wants to create 8x10 and wallet-size photos for family members and a photo printer that uses more than four colors of ink (more ink colors will print a broader range of color), such as Epson's 8-color Stylus Photo R800 (\$399; www.epson.com), should do the trick. Because Jacob wants to print different sizes of photos, he should also look at models that accommodate various paper sizes, such as the Canon Pixma iP6700D (\$179.99; www.usa.canon.com), which can print credit-card sized to 8.5- x 13-inch photo paper.



Keep Your PC Safe & Sound

Software You'll Need To Lock Down Windows



Connections are essential, whether you're talking about human contact, success in the business world, or just a link to the Internet. The downside is that an Internet connection can be both good and bad.

If you can access anything you like on the Web, it stands to reason that anyone can reach your computer, too, whether you want them to or not. Fortunately, there are security programs that can protect your data.

In this article, we'll describe the types of software you'll need to safeguard a PC running a Microsoft operating system in addition to downloading Windows Updates when available. (Mac and Linux users aren't safe from security threats, but the vast majority of malware out there targets Windows.)

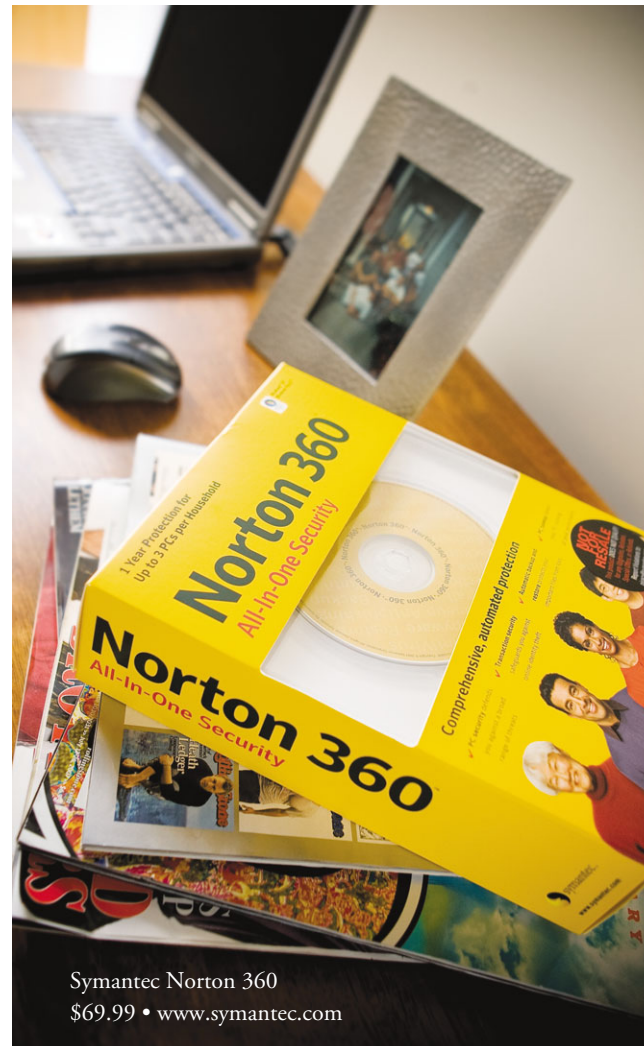
There are several all-in-one suites of security software available at your local Best Buy store, such as Symantec's Norton 360 for up to three computers per household (\$69.99; www.symantec.com). A comprehensive suite such as Norton 360, which also includes data backup features and tools to speed up your PC, may be all you need.

There also are individual examples of each security software genre for consumers who prefer an a la carte approach. For instance, antivirus software can ward off online threats such as worms and viruses. Some examples are Norton

AntiVirus 2007 (\$39.99) and Trend Micro AntiVirus Plus AntiSpyware 2007 (\$39.95; us.trendmicro.com). Look for protection against root-kits, which can hide other malware deeper than traditional security software can dig.

Speaking of antispyware, this genre blocks and removes software that installs itself without your permission to spy on your habits, show you ads, or steal your data. One of the best examples of antispyware is Webroot Spy Sweeper (\$29.95; www.webroot.com). However, many antivirus utilities now provide antispyware protection, too.

A good firewall utility examines data going into and out of your PC to try and make sure it's all legitimate. Best Buy generally sells firewalls as part of all-in-one security suites, such as McAfee Total Protection 2007 (\$79.99; www.mcafee.com). (Microsoft has included free, basic firewall protection in Windows since WinXP. Windows Vista's built-in firewall is an improved version, although you have to wade through hidden settings in order to tell it to filter outbound data as well as inbound



Symantec Norton 360
\$69.99 • www.symantec.com

traffic—something that virtually every third-party firewall does automatically.)

Antivirus, antispyware, and firewall protection are essential, but there are attractive additional options. Various security software filters spam from your email inbox; warns you of phishing sites (counterfeit Web sites trying to trick you out of personal information); and alerts you whenever sensitive information, such as credit card numbers or SSNs, are trying to leave your PC. And even a "safe" PC can become slow over time, so there are other utilities to speed things up, such as Avanquest System-Suite 7 Professional (\$59.99; www.avanquestusa.com). **PG**

BY MARTY SEMS

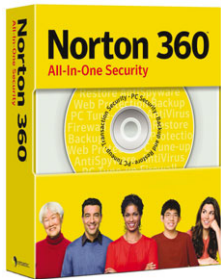
Computers

5 Must-Have Accessories

If you have a computer, you're undoubtedly going to want a few accessories to go with it. Here, we'll mention five that we consider necessities to our computing experiences. **EG**

BY KATHRYN DOLAN

1 Software: A security program and a productivity suite are must-haves for any computer. The Internet is amazing in minutes, you can catch up on the latest national and local news, buy round-trip tickets for your honeymoon in Italy, and chat in real time with your aunt in L.A. But malicious programs, such as viruses and spyware, are a fact of connected life. A good security suite with antivirus and firewall components will help minimize the threats you encounter. Office productivity suites usually include word processing, spreadsheet, and presentation programs (at minimum). With a word processor, such as Microsoft



Word, you can create mail merges and professional reports, and you can set up spreadsheets to track the books you've read with your bookclub and how your marathon training is going.

2 External Storage: An external drive, such as the Hitachi H31000U (\$419.99; www.hitachi.com), lets you easily back up your data. Its 1TB will give you cavernous amounts of space to which you can back up your entire system or just the pictures of your kids, financial data, and a few emails from friends. You might consider an external DVD drive, such as the LG DVD Writer GSA-E40L (\$99.99; us.lge.com), which supports USB 2.0 and is Windows Vista compatible, so you can back up the info on your hard drive to CD or DVD and store the discs somewhere outside your home. External drives usually attach to your computer pretty easily with either a FireWire or USB 2.0 cable.



3 Printer: If you want to make a copy of a friend's football picks, scan in invoices related to your home-improvement project, or print an occasional digital photo, you'll appreciate an all-in-one device that lets you print, copy, and scan. Many of these devices let you print borderless 4x6 pictures directly from your camera (or memory card), too. To do so, however, the camera and printer will both have to be PictBridge compatible. To print from a memory card, the printer needs a compatible card slot.

4 Backup Power: Summer can be stormy, with lightning strikes and power outages, either of which can damage or destroy delicate electronics. Protect your computer (and data) with a power conditioner. All of the units provide surge protection, and some feature multiple outlets with battery backup so you have a few minutes to save your data and shut down your computer and peripherals in a sudden loss of power.



5 Cleaning Supplies: Computers, and especially keyboards and mice, present unique cleaning challenges. They are dust and finger-print magnets, but they're hard to keep clean because you shouldn't use alcohol-based or abrasive cleaners or even plain old water on any of the components. Antistatic wipes help keep the dust off of delicate LCDs, and compressed air will blow the dust and crumbs from among the keys on your keyboard. Most often, antistatic wipes are safe to use on notebook screens and CRTs, as well.





Computers

Top 5 Things To Know



o matter what your skill level, there are a few basics you should know in order to enjoy the most productive, safest computing experience possible. Here are our Top 5.

1 Prevent data loss. If you're in the market for a new computer, it's smart to know exactly what extras you're going to want or need to go with your big purchase. Besides the keyboard, mouse, monitor, and tower, you'll want to get a good surge protector. This will keep your new investment safe from damage as a result of a power outage or electrical surge. A UPS (uninterruptible power supply) is a better option than a surge protector because it has a backup battery that keeps the power flowing smoothly for a few minutes after an outage. This will give you time to save what you were working on and properly shut down the computer to avoid data loss.

2 Protect yourself. Antivirus and firewall software are two things you'll need to protect your computer if you plan to go online. There are many third-party products available for both antivirus and firewall protection, but you may elect to use built-in programs such as Windows XP's firewall or Vista's Windows Security Center. (Built-in antivirus is not available with WinXP.) Regardless of what protective software you decide to use, make sure you keep it enabled and set to the product's

recommended settings. The trick to ensuring your firewall and antivirus do their jobs is that you have to keep them up-to-date. Most programs have a method for allowing you to manually (or your computer to automatically) check for updates so the software can detect new viruses, scams, and the like.

3 Perform backups. Even if you have been vigilant about performing routine maintenance, you'll likely experience a computer crash at one point. Whether it's a problem with your operating system or a burned-out hardware component, unless you have backed up the information, you may not be able to retrieve it—ever. Avoid this headache by scheduling regular backups. Once you've backed up your files and/or hard drive to an external drive, copy important files to a DVD and further secure your important data by storing it at an offsite location.


4 Consult an expert. If you have a computer problem you can't fix, find help. Clicking through error messages or putting up with slow processing speeds is annoying and can be a sign of a larger problem. Before you lose your valuable time and data, get a

professional to straighten things out. There are many options, including Best Buy's Geek Squad (www.bestbuy.com/geeksquad). This "24-hour computer support task force" offers carry-in, phone, and onsite support. The squad also makes house calls.

5 Budget for extras. Shopping for new computers these days is pretty tempting. It's easy to find a system for around \$500, but don't let that low number fool you. Remember that owning a computer comes with some additional expenses. For starters, some computers at the sub-\$500 price point don't include a monitor, so you'll want to watch for that and figure it in if necessary. If you don't already have one, you'll need to buy a printer and USB cable if you want to print anything. Also factor in your monthly ISP fee and look into whether you'll have to pay for a high-speed modem and installation or if they're included. Other extras could include productivity software such as Microsoft Office (you won't get this with a sub-\$500 PC, either), security software subscription fees, printer ink and paper, and a digital camera. **FG**

BY JENNIE SCHLUETER

Glossary Of Computing Terms



Shopping for a computer can be intimidating, especially with all of the complex terminology. Here we explain some common computer jargon.

Bluetooth—A short-range wireless standard that connects devices, such as computers, printers, PDAs, and digital cameras, and allows the devices and their users to communicate with one another.

broadband—Network connections that transmit high-speed Internet access. Cable companies can offer network speeds up to 8 to 11Mbps (megabits per second), whereas phone companies offer DSL (Digital Subscriber Line), which supports maximum speeds of 3 to 5Mbps. And, although not widely available, some power companies are exploring the possibility of offering high-speed Internet access to their customers, as well.

CRT—An old analog display technology for TVs and computer monitors. It features an electron gun illuminating phosphor dots that line the inside of a glass tube. When the phosphors are lit, they display on-screen images. CRTs consume a great deal of power and are heavy and bulky. Although many CRTs support digital signals, they degrade when converted to analog.

dual-core processor—This integrated circuit, which controls the computer,

features two processors, each with its own cache, on a single die or chassis. In a dual-core configuration, the operating system has two processors to handle instructions, speeding up the computer and its ability to multitask.

Ethernet—A widely used LAN protocol in which computers and networks are physically linked.

firewall—Hardware or software that limits access by a network or another outside source to your computer; it also may limit your computer's access to the network. These security measures are designed to protect your computer from outsiders who'd like to exploit it in some way. By the same token, firewalls may prevent infected files on your computer from accessing the larger network and spreading the problem to other users.

LAN—A group of computers that are physically connected by wires so they can communicate with one another and share information.

LCD—This digital display technology sandwiches liquid crystals between thin sheets of glass. The crystals twist and untwist to allow and block light from a backlight, forming the images you see. LCDs are thinner, lighter, and consume less power than CRTs. Initially used mostly in notebook PCs, you'll now find LCD TVs and computer monitors, as

well as LCDs on digital cameras, cell phones, portable DVD players, and PDAs, among others.

office suite—Productivity software, such as Microsoft Office, StarOffice, and Open Office, that often includes word processing, spreadsheet, presentation, database, and financial components.

operating system—The software, such as Windows XP, Windows Vista, or Mac OS X, that controls a computer and its peripherals and serves as the primary interface for the users.




processor—Also known as a microprocessor or the CPU (central processing unit), this integrated circuit controls the computer.






RAM—Random-access memory is a standard type of memory that's read from and written to by the CPU and hardware.

upgradeable—This term refers to the ability to add or swap out hardware to boost a computer's performance, increase its speed, or replace a defective or obsolete device or component. For instance, you may add more memory; replace an old CRT with a widescreen LCD; or swap out an older graphics card for a newer one that features an ATSC TV tuner so you can watch digital TV on your computer. Look for a computer with expansion slots or empty bays.

Which Notebook Computer Is Best For You?




A notebook computer is a pretty big purchase for most people, and it's usually a bit overwhelming, too. This chart compares the features and specs from several models available at Best Buy (www.bestbuy.com) and recommends models based on certain lifestyles.

What It Is	What It Means	Compaq Presario C571NR	Gateway MX8738	HP Pavilion dv6436nr
Operating system	The software (usually Windows or Mac OS X) that controls your computer	Windows Vista Home Premium	Windows Vista Home Premium	Windows Vista Home Premium
Processor	The chip that controls the computer (in general, the bigger the number, the better)	1.73GHz Intel Pentium Dual Core T2080	1.73GHz Intel Pentium Core 2 Duo T2080	1.8GHz AMD Turion 64 X2
Hard drive size	How much information the computer can hold	80GB	160GB	160GB
Optical drives	Drives that can read and write discs such as CD-Rs, DVD-RWs, or HD DVDs	Double-layer DVD±RW/CD-RW	Double-layer DVD±RW/CD-RW	Double-layer DVD±RW/CD-RW with LightScribe
RAM	Memory that is read from and written to by the processor and hardware; the more, the better	1GB DDR2 SDRAM	1GB PC2-5300 DDR2	2GB DDR2 SDRAM
Screen size	The diagonal measurement of the notebook's screen	15.4 inches	17 inches	15.4 inches
Media card reader	A slot that lets you use media cards without a separate peripheral	No	Yes	Yes
Coollest feature		Multiformat optical drive	Built-in 802.11b/g support	Integrated Web camera
Perfect for		College students who want to work and play	Users who work best at a local coffee house	Creating and watching your own movies
MSRP		From \$599.99	\$849.99	From \$899.99
		 8404158	 8398815	 8405745

	HP Pavilion dv9260nr	Sony VAIO VGN-CR12E/R	Toshiba Satellite X205-S9349	Apple MacBook MB062LL/A	ACER AS5920-6313
	Windows Vista Ultimate	Windows Vista Home Premium	Windows Vista Home Premium	Mac OS X 10.4 Tiger	Windows Vista Home Premium
	2GHz Intel Centrino Duo T7200	1.8GHz Intel Centrino Core Duo Mobile T7100	1.8GHz Intel Core 2 Duo Mobile T7100	2.16GHz Intel Core 2 Duo Mobile	1.5GHz Intel Centrino Core 2 Duo Mobile T5250
	200GB	160GB	240GB	120GB	160GB
	Double-layer DVD±RW/CD-RW/HD DVD-ROM	Double-layer DVD±RW/CD-RW	Double-layer DVD±RW/CD-RW/HD DVD-ROM	Double-layer DVD±RW/CD-RW	Double-layer DVD±RW/CD-RW/HD DVD-ROM
	2GB PC2-4200 DDR2	2GB PC2-5300 DDR2	2GB PC-5300 DDR2 SDRAM	1GB PC2-5300 DDR2 SDRAM	2GB PC2-5300 DDR2 SDRAM
	17 inches	14.1 inches	17 inches	13.3 inches	15.4 inches
	Yes	Yes	Yes	No	Yes
	Built-in PVR with ATSC/NTSC TV tuners	Built-in Web camera & 802.11a/b/g/n support	Fingerprint reader	Loaded with software	Acer Crystal Eye Web cam
	Entertainment buffs looking for a desktop replacement	Users who like to stay connected to family and friends	Road warriors who want full functionality and some fun	Mobile users who appreciate wireless connectivity	Those looking for a light-weight, full-featured system for a student
	From \$2,049.99	\$1,199.99	\$1,849.99	\$1,299	\$1,299.99
					
	8216478	8404318	8403569	8376125	8391901

Which Desktop PC Is Right For You?

When you shop for a desktop PC, you'll see lots of similar deals. The comparison chart below shows how subtle—yet important—the differences can be. If you can't find one of these on Best Buy's Web site (www.bestbuy.com), visit or call your local Best Buy store, and it should be available there.

What It Is	What It Means	Acer Aspire ASE 380-UD480A	Apple iMac MA710LL/A	Sony VAIO VGC-LS30E
Processor	The chip that controls the computer (in general, the bigger the number, the better)	AMD Athlon 64 X2, 2.4GHz	Intel Core 2 Duo; 1.83GHz	Intel Pentium Dual Core T2080 1.73GHz
Hard drive size	How much information the computer can hold	400GB	160GB	250GB
RAM	The memory a computer uses to run all PC applications	2GB	512MB	2GB
Optical drives	Drives that can read and write discs such as CD-Rs, DVD-RWs, or HD DVDs	Double-layer DVD±RW/CD-RW	Slot-loading DVD-ROM/CD-RW drive	Double-layer DVD±RW/CD-RW
Operating system	The software (usually Windows or Mac OS X) that controls your computer	Windows Vista Home Premium	Mac OS X 10.4 Tiger	Windows Vista Home Premium
Loaded software	Preinstalled applications for performing specific tasks	MS Works 8.5, Money 2006, CyberLink Power2Go, and more	iLife '06, FrontRow, PhotoBooth, Omni Outliner, and more	Microsoft Works 8.5, Sony Click To DVD, and more
Graphics card	Controls the quality of your video and images	Nvidia GeForce 6100 and nForce 430MCP	Intel Graphics Media Accelerator 950	Nvidia GeForce GO 7400 GT
Ports	A socket that gives your computer access to different peripherals	8 USB 2.0 (4 front, 4 rear); 1 FireWire; 1 serial; 1 parallel	5 USB 2.0; 2 FireWire	4 USB 2.0; 1 FireWire
Best for		Managing and storing multimedia	Style-conscious users in a tight space	Watching and recording live TV
Coollest feature		Processor—one of the best on the market	Built-in iSight camera	TV tuner and 19-inch widescreen display
Best Buy price (before any rebate)		\$589.99	\$999.99	\$1,799.99
		 8432895	 8040274	 8355745

	Compaq Presario SR5130NX	eMachines T5230	Gateway GM5472	HP Pavilion Media Center m8100n	HP Pavilion Media Center m8150n
	AMD Athlon 64 X2 2GHz	AMD Athlon 64 X2 2.3GHz	AMD Athlon 64 X2 Dual Core 2.6GHz	AMD Athlon 64 X2 2.8GHz	Intel Core 2 Quad 2.4GHz
	200GB	250GB	500GB	500GB	640GB
	1GB	1GB	2GB	3GB	3GB
	Double-layer DVD±RW/CD-RW with LightScribe	Double-layer DVD±RW/CD-RW	Double-layer DVD±RW/ CD-RW	Double-layer DVD±RW/CD-RW with LightScribe	Double-layer DVD±RW/CD- RW w/LightScribe
	Windows Vista Home Premium	Windows Vista Home Premium	Windows Vista Home Premium	Windows Vista Home Premium	Windows Vista Ultimate
	Microsoft Works 8, Adobe Reader 7.0, Roxio Creator	Works 8.5, Adobe Reader 8.0, Digital Image Starter 2006	Digital Image Starter, CyberLink Power2Go, Adobe Acrobat Reader	HP PhotoSmart Es- sential, Roxio Creator, muvee Auto Producer	Works 8.5, DVD Maker, Windows Movie Maker
	Nvidia GeForce 6150 SE	Nvidia GeForce 6150 SE	Nvidia GeForce 6150 SE	Nvidia GeForce 6150 SE with Turbo Cache	Nvidia GeForce 8400 GS
	4 USB (2 front, 2 rear)	6 USB (2 front, 4 rear); 1 serial; 1 par- allel	6 USB; 2 FireWire; 1 serial; 1 parallel; 1 S- Video; 1 composite	6 (2 front, 4 rear); 2 FireWire; 1 S-Video	6 USB 2.0; 2 FireWire; 1 S- Video
	Digital photo enthusiasts	Everyday productivity	Television lovers	The whole family	Home-entertain- ment buffs
	Front-panel 15-in-1 media reader	Upgradeable, budget PC	Built-in ATSC/NTSC TV tuner	Multimedia capabilities	HD DVD-ROM Drive
	\$449.99	\$479.99	\$729.99	\$864.99	\$1,414.99
					
	8397335	8398735	8398806	8398584	8433368

From Cell Phone To Printer

Get Prints From Your Phone

The best photo moments often occur when we least expect them and when our camera is unavailable.

If there's one device we always have on hand, though, it's our cell phone. Many phones have cameras built in, and although our camera phone may not take the same quality of photos as our digital camera, a picture taken with a cell phone is definitely better than no picture at all.

Camera phone pictures aren't very useful when you can only view them on your handheld. Thankfully, many options are available that let you print and share these shots.

The best way to back up the photographs taken with your camera phone is to transfer them to your computer's hard drive. There are a number of ways to do this. You can purchase software that lets you connect your phone directly to your computer, such as Susteen's DataPilot Cell Phone Data Transfer Suite w/ Bluetooth Adapter & Charging Cables (\$69.95; www.susteen.com). DataPilot comes with nine charging phone connectors and a Bluetooth adapter to connect a variety of phones regardless of carrier. One of the cool things about DataPilot is that it lets you do more than upload photos—you can back up your address book, sync your calendar, use your phone as a wireless modem for your laptop, and transfer ringtones from the computer to the phone. Regardless of which software you choose, it's always a good idea to verify the software supports your phone and that appropriate cables are included before buying any software package.



If your phone and computer support Bluetooth, you may be able to connect the two devices and transfer pictures wirelessly. Some printers also support Bluetooth, such as the HP Photosmart C7180 All-in-One (\$399.99; www.hp.com). If your printer can connect to your phone, you may be able to print photos directly, without uploading or physically connecting devices.

Some phones accept memory cards. By storing your camera phone pictures on a memory card, you can easily transfer pictures from your phone to your computer. To back up and print the photos, remove the card from your phone and place it in a card reader, such as the SanDisk MobileMate SD Plus 5-in-1

Reader (\$19.99; www.sandisk.com). As an additional benefit, a card reader doesn't use your cell's battery, so you're free to talk or use your phone while the photo transfer is underway.

Finally, if you create an account with Best Buy's Photo Center @ Kodak Gallery (bestbuy.kodakgallery.com), enter your mobile phone number during the sign-up process. This will allow you to send pictures from your camera phone to the Gallery (cell phone data fees will apply). After uploading pictures, you can order prints and gifts or share your photos with friends. **PG**

BY JENNIFER JOHNSON

Cell Phone Q&A

Get To Know Your Phone

Today's mobile phones are more pocketable than ever, but they're also more complex than older, bulky models. They're also more important; whereas we regarded the early cell phone as a convenience, we have trouble imagining a day without current phones. If your wireless wonder ever raises questions that the manual can't answer, check out these questions and answers. **FG**

BY JOSHUA GULICK

QUESTION

Can I use any cell phone with any service plan?

ANSWER

We wish. Most mobile phones work with one of the two most popular wireless networking technologies: GSM (Global System for Mobile Communications) or CDMA (Code-Division Multiple Access). Both networking technologies are widespread in the United States, but GSM is more prevalent outside the country (it is particularly popular in Europe).

If you're shopping for a phone without a service plan, pay attention to whether the phone supports GSM or CDMA, as the phone won't work with your existing service plan if it doesn't have the right technology. AT&T and T-Mobile use the GSM standard, while Sprint PCS and Verizon use CDMA.

THE BOTTOM LINE

Make sure your phone supports your service's network before you buy it.

QUESTION

I dropped my phone into a puddle. Now what?

ANSWER

Cell phones are tougher than they look. Although most mobile phone manufacturers don't claim that their phones are water-resistant, many phones can undergo a quick dunk. "The key is to minimize the time the phone is wet and the time the battery is on the phone while it is wet," says John Wernecke, spokesperson for Motorola. "Remove the battery. Give it time to dry before replacing the battery. Some have reported that wrapping the phone in a thick towel to absorb liquid works very well."

In our own experience, we've found that phones often need as much as 48 hours to completely dry. Once you've dried and then reassembled the phone, power it on and place a test call to make sure the phone works properly. If your phone displays problems (or doesn't power on at all), it's probably time to find a new phone.

THE BOTTOM LINE

Separate the phone and battery and then let both dry for a couple of days.

QUESTION

What's the easiest way to transfer contact information from one phone to another?

ANSWER

In most cases, your cell phone service provider can move the contact info for you at its local retail location.

However, people who have GSM-based phones, such as AT&T and T-Mobile, have another option. GSM-based phones have SIM (subscriber identity module) cards, which store your user information and contacts. To transfer the information, simply pull this card (it likely sits behind the phone's battery) and then pop it into your new phone.

THE BOTTOM LINE

Ask your service provider to move your address book to the new phone. If you have GSM-based phones, you can swap SIM cards.

QUESTION

My new phone has Bluetooth. What is it?

ANSWER Bluetooth is a wireless networking standard that lets your phone communicate wirelessly with other devices. The standard isn't as robust as wireless networks for PCs (many Bluetooth devices have a range of only 33 feet), but it easily handles data transfers between nearby devices. Wireless headsets are the most popular Bluetooth-based phone accessories.

Don't buy a new phone simply because your existing phone lacks Bluetooth, however. Many headsets include a Bluetooth adapter that you can plug into your phone, and you can store an adapter with your headset until you're ready to plug in.

THE BOTTOM LINE

Cut the cord with a Bluetooth-enabled wireless headset. You'll never look back.

QUESTION

What is the difference between GSM, GPRS, and EDGE?

ANSWER If you have a GSM-based phone that can browse the Internet or transfer pictures wirelessly, your phone likely includes GPRS (General Packet Radio Service).

The communication technology complements GSM by providing wireless data transfers. GPRS service lets your service provider offer video streaming, emails that include pictures, and other data-dependent communications. The service isn't fast by computer networking standards (it's about as fast as a dial-up modem), but it handles phone communications well.

Some new phones support EDGE (Enhanced Data Rates for GSM Evolution), which also complements GSM networks. EDGE technology delivers data transfers to and from your mobile phone, just as GPRS does, but at about triple the speed.

THE BOTTOM LINE

GPRS helps your phone browse the Internet.

QUESTION

How can I dispose of my old phone?

ANSWER As with other electronics, mobile phones and their batteries can include toxic materials. Thanks to reuse and recycle programs, you can reduce your phone's impact on the environment by donating it.

Finding a cell phone collection site is easy. Many major retailers and product manufacturers are part of the EPA's (Environmental Protection Agency's) Plug-In To eCycling partnership. These businesses offer donation acceptance events or help customers find places to donate electronics.

Best Buy, for example, hosts recycling events and collects old phones via drop-off kiosks at its stores. You can also ship your old phones to Best Buy's recycling partner, ReCellular (www.recellulartradein.com), which offers Best Buy Digital Dollars that you can redeem when you shop at Best Buy's Web site.

THE BOTTOM LINE

Don't trash your old phone or other electronics. Recycle centers make donating your phone a snap.

Samsung SCH-u740
\$299.99; \$79.99 with a two-year Verizon Wireless plan
www.verizonwireless.com



Samsung Upstage SPH-M620
\$349.99; \$99.99
with a two-year Sprint PCS plan
www.samsung.com



Need A New Mobile Phone?

Let Your Answers Be Your Guide

Cell providers are in such a frenzy to get your service contract dollars that they're falling over themselves to put the hottest tech in the palm of your hand. If you want to find a phone that's right for you, just answer the following questions:

BY TRACY BAKER

*** Do you want your phone to double as a digital music player?**

- ☐ No
- ☐ Some support would be nice
- ☐ I want the phone to replace my existing digital music player

*** Are camera features important?**

- ☐ No
- ☐ I have a digicam, but I'd like to occasionally snap photos
- ☐ I want to take high-resolution pictures and record video

*** What is your budget?**

- ☐ I want a phone that's free with a service contract

- ☐ No more than \$200
- ☐ Sky's the limit...

*** What will you use your phone for?**

- ☐ Mainly voice calls and some text messaging
- ☐ Voice calls, lots of text messaging, and email
- ☐ A ton of voice calls, text messages, emails, and I need Internet access

*** Does size matter?**

- ☐ As long as it fits in a purse, I'm happy
- ☐ If it was up to me, my phone would fit in a credit card pocket
- ☐ I'll settle for a larger model if it has cutting-edge technology

*** Do you want a phone that doubles as a PDA?**

- ☐ No, I like having my PDA separate
- ☐ It would be ideal to use the phone as a backup PDA
- ☐ Yes, I want the phone to replace my current PDA

*** Which is more important—a longer battery life or more features?**

- ☐ Definitely battery life—I need my cell phone to be constantly accessible
- ☐ Battery life is important, although I'm willing to sacrifice a little to get some juicy tech
- ☐ I'll recharge when necessary—bring on the features

Your Score:

Give yourself **0** points for every **blue** answer, **1** point for every **pink**, and **2** points for every **green**.

Add up your score and see which type of cell phone is perfect for you (bear in mind that the retail prices listed here will likely be much lower when you sign a service contract and that phones are only available from certain service providers):

0-4: Just the basics. Looks like you need a no-frills cell phone, plain and simple. Try to find a model that is very inexpensive or free and that doesn't support battery-sucking features such as Wi-Fi or high-resolution video capture

that you'll never use. There are phones at this level that play digital music, but good luck finding one with decent PDA abilities.

Check out these models:

Samsung M300 (\$179.99; www.samsung.com) with service from Sprint; Motorola RAZR V3 (\$249.99; www.motorola.com) with service from AT&T; Sanyo Katana II (\$249.99; www.sanyo.com) with service from Sprint.

5-10: Time to go upscale.

If you score in this range, look for sleek phones that have decent

music playback capabilities and integrated keyboards, which make it much easier to send text messages and emails.

Check out these models: LG enV VX9900 (\$399.99; www.lge.com) with service from Verizon; Samsung Upstage M620 (\$349.99; www.samsung.com) with service from Sprint; Nokia N75 (\$349.99; www.nokia.com) with service from AT&T.

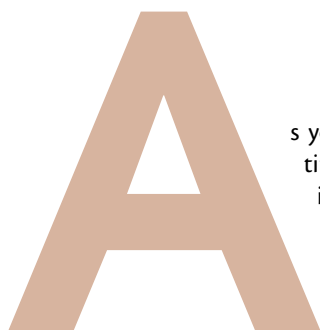
10-14: The works. You want it all, and you want it now. Cell phones that sell north of \$200

should be absolutely packed with tech ranging from digicams to Wi-Fi. If you'll use the Internet often, find out what type of high-speed data network the phone uses because some protocols are slower than others.

Check out these models: BlackBerry 8703e (\$549.99; www.blackberry.com) with service from Sprint; Samsung BlackJack i607 (\$499.99; www.samsung.com) with service from AT&T; Palm Treo 700p (\$549.99; www.palm.com) with service from Verizon. ●

Get Organized

Features To Look For In A PDA Or Smartphone



As your kids prepare to head back to school, what better time is there to get organized? With fall sports, upcoming holidays, and countless personal events around the corner, keeping your calendar, task list, contacts, and other notes in a central location is important to ensure you don't miss an event or forget to pack a lunch for your daughter's field trip.

Paper and pencil have long been the choice of many to assist with "life" organization. If you've considered making the switch to digital and haven't done it yet, there's no time like the present. Smartphones and PDAs make terrific organizers and offer plenty of additional functionality that you wouldn't get from your paper companion.

Shopping for a new smartphone can be exciting, but it can also be confusing. While shopping for a smartphone or PDA, you'll need to ask yourself a few questions about usage, price, and features. Before you leave the house, here are some questions you'll want to ponder.

Do I need a cell phone service plan?

All smartphones available through Best Buy require that you purchase a cell phone contract. Smartphones also require that you purchase a data plan for an additional fee. After selecting the Samsung BlackJack i607 (\$149.99 with a two-year contract from AT&T; www.samsung.com) from BestBuy.com, we were met with the following instructions: "Please select an AT&T Data feature so you can email and Web browse from your new AT&T phone! The phone

price you pay today requires that you purchase and maintain for 6 months one of these feature options."

PDAs, such as the Palm Tungsten E2 (\$199; www.palm.com), do not require you to buy a cell phone service plan. These gadgets offer similar organizational features as a smartphone, but they do not include the ability to make phone calls. If the PDA you select has integrated Wi-Fi, you'll be able to access the Internet from available Wi-Fi hot-spots, such as those you'll find at a local coffee shop or an airport.

Do all the necessary software and accessories come with a smartphone? If not, what is available?

Each smartphone differs as to what accessories are included. Many smartphones come with an AC adapter for charging. Some smartphones come with carrying cases, car chargers, wired headsets, and more. Bluetooth headsets, hands-free car kits, adapters to mount the phone in the car, and additional cases are some of the accessories you may want to consider purchasing separately. With a Bluetooth headset or hands-free car kit, you can talk on the phone without having to hold the

phone to your ear, thus leaving your hands free for other tasks such as cooking or shopping.

Can I keep my number?

If you're switching from one wireless carrier to another within the same local service area, and if the number is a local number in the new carrier's service area, then you should be able to transfer your number. You may also be able to transfer your landline or prepaid number. Check with a Best Buy sales associate for more information on moving your number to a different phone.

Choices for PDAs and smartphones are plentiful. Here are a few of our favorites. Because prices will vary, check with the carrier or your local Best Buy for special offers that may be available.



BlackBerry 8703e

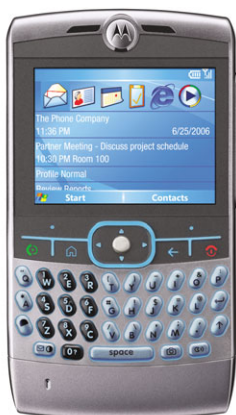
www.rim.com

\$549.99

Carriers: Sprint PCS and Verizon Wireless

○ Perhaps best known for instant email delivery, BlackBerry smartphones are a popular choice among many mobile professionals. The BlackBerry 8703e supports EVDO (Evolution Data Optimized) connectivity for fast, always-on email on either the Sprint PCS or Verizon Wireless network. This smartphone can also provide access to the Internet for your laptop or PC using its tethered modem capabilities. In addition, the color screen adjusts to available light to save the battery.

○ Perfect For: Email junkies



Motorola Q

www.motorola.com

\$499.99

Carriers: Sprint PCS and Verizon Wireless

○ For the email and usability features of a BlackBerry, but with the familiar look and feel of your desktop computer, look to the Motorola Q. It takes time to adjust to any new device. You can reduce that learning time by choosing a smartphone that operates similarly to something you already use, namely a desktop computer. Think of the Windows Mobile 5.0 OS that runs on the Q as a simplified version of the Windows OS running on your PC. Perhaps best of all, this thin smartphone measures less than a half-inch thick, which is even thinner than the popular Motorola RAZR V3.

○ Perfect For: RAZR lovers



AT&T 8525

www.wireless.att.com

\$599.99

Carrier: AT&T (formerly Cingular)

○ The AT&T 8525 operates on both 3G (third-generation) UMTS/HSDPA and traditional GSM/GPRS/EDGE networks to give you coverage around the globe. Using this handheld's slide-out QWERTY keyboard, you'll be amazed at the amount of work you can do without your laptop. Simultaneous voice, email, and data capabilities mean that you can talk on the phone and reference emails and other documents on the Internet without having to interrupt the call. Another unique feature on the 8525 is its integrated Wi-Fi capabilities that let you surf the Internet at high speeds from available hotspots.

○ Perfect For: World travelers



Palm Treo 680

www.palm.com

\$499.99

Carrier: AT&T (formerly Cingular)

○ If you're already accustomed to the Palm OS on your old PDA, stick with the familiar by getting the Treo 680. This smartphone has an internal antenna and a more rounded shell in comparison to previous-generation models. It also has Bluetooth, which lets you connect a number of wireless devices, such as a GPS receiver, headset, or hands-free car kit to add even more functionality.

○ Perfect For: Palm PDA users



Samsung BlackJack i607

www.samsung.com

\$499.99

Carrier: AT&T (formerly Cingular)

○ Search the Internet at blazing speeds using AT&T's Samsung BlackJack with 3G connectivity. This smartphone supports AT&T Mobile Music, Cellular Video, and MEdia Net to make downtime more entertaining. Plus, the BlackJack has all of the standard email and organizational features you'd expect from a smartphone in a thin and lightweight package.

○ Perfect For: Speed-conscious downloaders **FG**

BY JENNIFER JOHNSON

Wireless Shopping Tips

A Car Charger For Your Cell Phone

BY JOSHUA GULICK



Don't overlook a car charger for your new cell phone. You'll find the charger handy on long drives and even handier when you forgot to pack a standard power adapter. Take this list shopping to make sure you find a charger that meets your needs.

The average car charger has two connectors. The larger connector plugs into the car's power socket; the other connector attaches to your phone's power port. This is the important connector because power port shapes vary among phones. The car charger that powers your Samsung SPH-A680 won't fit your Motorola RAZR V3m. To that end, many car charger boxes display the charger's connector and list compatible phones. Take your standard power adapter with you and compare the connectors to find a match. Best Buy.com lists compatible accessories for various phones on its site.

Most car chargers support more than one phone model. The Just Wireless Mobile Charger 03202 (\$23.99; www.bestbuy.com), for example, supports multiple Motorola V, C, and T series phones, as well as Nextel's i series phones. Check the charger's package to see which phones it supports. However, a charger made by your phone's manufacturer may not necessarily support your model: The Motorola Car Charger VC700 (\$24.99; www.store.motorola.com) supports only Motorola cell phones that have mini USB ports.

Many car chargers now have an LED that sits at the base of the charger, near the power port connector. The

light powers on when you push the connector into the port and powers off when the charger is removed from the connector. You'll find the light helpful when you drive on bumpy roads that can shake the connector loose. Keep in mind that the light only indicates whether the car charger is plugged into the car's power port; your phone should indicate when it's fully charged.

Bulky car chargers can get in the way when you reach for other controls on your car's console. To that end, some charger manufacturers build hinged car power socket connectors that fold toward the console. The Just Wireless Vehicle Charger For Nokia Cell Phones 03206 (\$23.99; www.bestbuy.com), for example, has a large base that can flip out of the way without dislodging the connector.

Sometimes wall adapters and car chargers aren't enough. If your cell phone has run out of battery power while you jogged or biked, you know how frustrating (and dangerous in an emergency) a dead battery can be. To that end, charger manufacturers also offer portable chargers, which act as external battery packs. The Motorola P790 Portable Charger (\$49.99; www.store.motorola.com) can charge your phone twice before you need to recharge the charger itself.

SHOPPING CHECKLIST

☐ Does the charger's connector match your phone's power port?

☐ Yes

☐ No

☐ Do you know your phone's model number?

Manufacturer _____

Model _____

☐ Does the charger have a light?

☐ Yes

☐ No

☐ Does the charger have a flexible power socket connector?

☐ Yes

☐ No

☐ Do you need a portable charger?

☐ Yes

☐ No

☐ Notes

CUT HERE

Music Players

5 Must-Have Accessories

Nailing down a list of must-have accessories for an MP3 player is tricky. Just because an iPod dock for the kitchen tops your list, for example, doesn't mean it even cracks an avid jogger's Top 5. Ultimately, though, five general categories stand out, although other notable accessories include extra batteries, cleaning kits, and Bluetooth adapters.

1. Headphones.

A runner sometimes doesn't fare well with earbuds. They fall out due to the constant jostle of running, and this can become a burden for anyone hoping to get in a good workout. It's essential to match your earphones to your needs, or your experience will be diminished. A runner should opt for a headphone that's secure, and in this case, an in-the-ear earbud would be the ideal choice. Headphone styles are numerous and include wired/wireless earbuds, which are perfect for people on the go (students, mass transit users), and earcups, which can satisfy any audiophile's need to hear minute musical details.

2. Speakers/docks.

Whether you're making sandcastles on the beach, taking your boat to the lake, or enjoying a Labor Day picnic with the family, there's no limit to where you can listen to your MP3 player. You needn't let the pair of headphones it came with constrain you, either; portable speakers and docks are perfect for letting the entire group listen to tunes in open areas. In addition, most speakers have a dock to recharge your player's battery. Check your MP3 player manufacturer's Web site for model numbers of available speakers and docks, and you'll likely be able to buy it at Best Buy.

3. FM transmitter.

If you're motoring about in a truck or Trans Am for leisure or work, MP3 players can provide the soundtrack for that motion. To do so, you'll need an FM transmitter that can beam your MP3 player's tunes over your car radio. Connect the transmitter to your player, select a designated frequency on the car radio dial, tune to that same frequency on your transmitter, and you are listening to music, movies, podcasts, audiobooks, etc. Transmitters range from basic (maybe offering three presets) to sophisticated models (providing remote controls and visual interfaces), making it easy to find one that suits your needs.

4. Cases.

You decided to splurge and buy a high-end MP3 player. Because you've already spent so much, it's only right to assume that you have everything you need, right? Not quite. Although they're partially a vanity purchase, cases can protect your player from scratches, bumps, water, physical drops, and mishaps that can otherwise shorten your player's life. No matter what type of MP3 player you own, it's wise to purchase a case to protect it in different environments. Cases are relatively inexpensive (around \$20 and up) and can provide a little more insurance against any accidents or

normal wear and tear that can happen. Because not all cases will work with your player, check the MP3 player manufacturer's Web site or a retailer like Best Buy for ones that are compatible.

5. Armbands.

We all know that music is a huge exercise motivator. Although they're often overlooked, armbands can mean a difference between a workout you're proud of vs. one that's constantly interrupted by accidental drops and tugging, tangled cords. No matter your sport, an armband, such as Griffin's Tempo (\$24.99; www.griffin-technology.com), which fits around your bicep, generally offers the most stability and comfort. Otherwise, a basic lanyard is an inexpensive, yet effective, alternative for less strenuous workouts. **FG**

BY BLAINE FLAMIG



MP3 Players

Top 5 Things To Know

Finding the perfect digital music player is all about asking the right questions. DRM (digital rights management) and other competing standards have made it tougher than ever to find a player that will meet all of your needs, but here are the five most important things to keep in mind while shopping, along with the answers you'll want to hear before committing to a particular device.

1 Memory capacity.

The capacities listed for most MP3 players are based on low-quality audio recordings, which result in small file sizes. Songs recorded at a higher quality, which is probably what you'll prefer and be listening to most often, will take up more space, so you'll fit fewer songs on the player. For example, a player can store three times as many songs recorded at 64Kbps as those at 192Kbps, but the sound quality for the 192Kbps tracks is more than three times better than that of the 64Kbps tracks.

Where storage is concerned, there are eight bits in a byte, 1,024 bytes in a KB (kilobyte), 1,024KB in a MB (megabyte), and 1,024MB in a GB (gigabyte). If you record tracks at 192Kbps, divide that number by eight to get 24KBps. There are 60 seconds in a minute, so that means your audio requires about 1,440KB (1.41MB) of storage per minute or about 84.5MB per hour. Therefore,

each gigabyte of memory will hold about 12 hours of 192Kbps audio.

2 Type of memory.

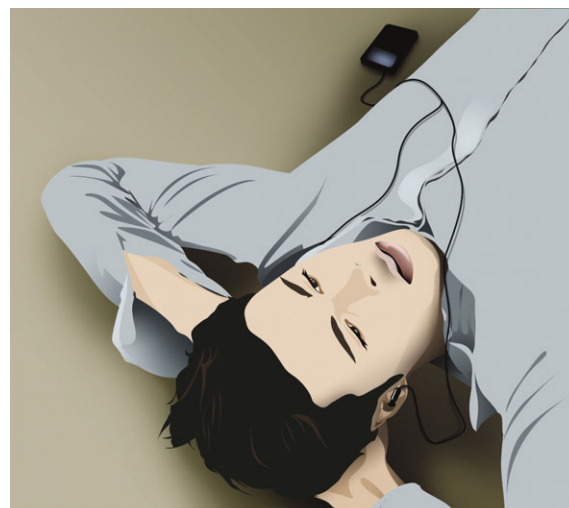
Hard drives offer relatively high storage capacities at a relatively inexpensive price, but they have a lot of moving parts that tend to break if you drop the device while exercising, which often ruins the player beyond repair. Flash memory (also called solid-state memory) is more expensive per megabyte and gigabyte than hard drives, but because the memory uses no moving parts, it is more durable. Devices that use flash memory are terrific for running or other activities where you may shake or drop your player.

3 File format support.

Just as digital photos and movies use a variety of file formats, so do digital audio files. You'll see MP3, AAC (Advanced Audio Coding), WMA (Windows Media Audio), and FLAC (Free Lossless Audio Codec), to name a few. If you have already converted or downloaded a large amount of music in a particular format, make sure the player you want can handle it. If not, you can tailor your conversions and downloads to match the capabilities of the device.

4 File downloads.

This is a biggie. Due to conflicting DRM schemes and other factors, to download



tracks directly from Apple's iTunes Store (www.itunes.com), you'll need an iPod. Several subscription-based services, such as Napster To Go (www.napster.com), let you download unlimited amounts of music to a particular player, but they're only compatible with certain makes and models. Look for the PlaysForSure or Works With Napster To Go logos when shopping to find MP3 players that are compatible with your favorite services.

5 Battery life.

Official battery life measurements are performed in a laboratory and, as a consequence, don't always match real-world performance. First, ask the salespeople if they have any experience with the battery life of a product you are considering. Then, be sure to ask how long the batteries should last if you listen at a reasonable volume level (loud music consumes more electricity because the headphones require more power). Finally, you might also look for power-cutting options, such as the ability to turn off the screen's backlight and audio normalization (which tones down loud music). **FG**

BY TRACY BAKER

MP3 Player Glossary

Who doesn't want an MP3 player? It can help you relax, provide motivation, and keep you up-to-date on news. When you head to your local Best Buy (www.bestbuy.com) to snag one, make sure you have this glossary so you can choose the perfect model.

AAC—Short for Advanced Audio Coding, it is a competitor of the more popular MP3 file format.

Click Wheel—Apple's proprietary circular control on the front of the iPod.

download—In terms of digital music, downloading is when you retrieve a song from an Internet site or another network connection and save it to your computer or music player. You'll download songs from music service Web sites such as iTunes, Napster, or Rhapsody.

DRM—Digital rights management is a security mechanism for digital media. A common DRM scheme for digital music involves getting a license file to authorize playback of a free or purchased song.

earbuds—Small, circular devices you put into your ears that serve the same function as headphones. MP3 players come with their own earbuds, but you can, of course, purchase a separate pair that are more comfortable or of better quality.

flash memory—Solid-state memory with no moving parts that is lightweight and small. In terms of MP3 players, a flash-based player is lighter and smaller than a hard drive-based player, and it also won't skip. Thus, flash-based players are popular for use during exercising. However, the capacity of a flash drive isn't as large as a hard drive.

FM tuner—In MP3 players, a built-in FM tuner lets you listen to local radio.

hard drive—Storage in which rigid platters are inside a fixed casing. In terms of MP3 players, a hard drive-based player is larger and heavier than a flash-based player. Because of the moving parts (the platters), hard drive-based players are also prone to skipping. However, the capacities are much larger than flash-drive capacities.

iTunes—A digital media player application that loads onto your computer and lets you play, organize, and download and purchase music, videos,

podcasts, and television shows for an iPod or computer.

MP3—Perhaps the most popular digital audio encoding format. It compresses audio to about one-twelfth the original size while still providing excellent sound. In general, a 1MB MP3 file will last about one minute.

playlist—A queue of songs a user creates to play on a computer, burn to a CD, or transfer to a digital audio player. The playlist includes only directions to the location of the songs, not the songs themselves.

PlaysForSure—A popular Microsoft certification that ensures portable devices, such as MP3 players, and media, such as digital music and videos, are compatible with each other.

podcast—A downloadable episode that is similar to a radio program. A user can subscribe to a podcast for updated episodes, or she can download podcasts one at a time. A podcast is usually available in MP3 format.

screen—The display on the front of a portable music player. A player's screen can either display in color or black and white.




WMA—Windows Media Audio is a digital audio format created by Microsoft to compete with the MP3 format. WMA files are smaller than MP3 files.

widescreen—A screen with a 16:9 aspect ratio. In terms of music players, the Microsoft Zune and the Creative Zen Vision W are two that have widescreens.



Which MP3 Player Is Best For You?

iPods are cool, sure, but you have other choices when it comes to listening to your tunes. This chart compares the most important—and coolest—features from select MP3 players available at Best Buy (www.bestbuy.com).




		Hard Drive		
What It Is	What It Means	Apple iPod	Creative Zen Vision: W	Microsoft Zune
Memory type	Hard drive (moving parts, more capacity) or flash (no moving parts, lightweight, perfect for exercising)	Hard drive	Hard drive	Hard drive
Capacities	How much memory the player has (on models available at Best Buy)	30GB; 80GB	30GB	30GB
Songs	How many songs the player can hold	7,500; 20,000 (based on 4 minutes per song at 128Kbps AAC)	15,000 (based on 4 minutes per song at 128Kbps WMA)	7,500 (based on 4 minutes per song at 128Kbps WMA)
Video capability	Some MP3 players can play video, as well as music	Yes	Yes	Yes
Colors	Several players offer a variety of color choices	Black, white	Black	Black, white, brown, pink
FM tuner	Lets you listen to radio stations	No	Yes	Yes
Music services supported	Not all MP3 players can play songs from all music services	iTunes	Rhapsody To Go; Napster; Soundbuzz; Yahoo! Music; Audible.com	Zune Marketplace
Battery life	How long the battery will last when playing music	14 hours; 20 hours	13 hours (4.5 hours of video)	14 hours
Perfect for		Those interested in a storage device as much as a music player	Users who like to get their music from a variety of sources	Users who enjoy sharing and who might be hard on their devices
Coolest feature		It's an iPod: Need we say more?	4.3-inch widescreen	Wi-Fi lets you share music with other Zune users
MSRP		\$249; \$349	\$299.99	\$249.99
		 8046072	 8043761	 8330521








Flash

	Apple iPod nano	SanDisk Sansa Express	Insignia NS-DV4G	Samsung YP-K3JQR	SanDisk Sansa e250R
	Flash	Flash	Flash	Flash	Flash
	2GB; 4GB; 8GB	1GB; 2GB	2GB; 4GB	2GB	2GB
	500; 1,000; 2,000 (based on 4 minutes per song at 128Kbps AAC)	500; 1,000 (based on 4 minutes per song at 64Kbps WMA)	500; 1,000 (based on 4-minute songs at 128Kbps WMA)	500 (based on 4-minute songs at 128Kbps WMA)	500 (based on 4-minute songs at 128Kbps WMA)
	No	No	Yes	No	Yes
	Black, silver, pink, blue, green	Black, white, pink, red	Black	Red	Black
	No	Yes	Yes	Yes	Yes
	iTunes	Best Buy Digital Music Store; Napster; Rhapsody	Best Buy Digital Music Store	Best Buy Digital Music Store; Rhapsody	Best Buy Digital Music Store; Napster; Rhapsody
	24 hours	15 hours	20 hours	25 hours	20 hours
	Joggers; iPod lovers who aren't interested in carrying their entire library with them	Users who want an ultracompact player that weighs only 10.4 ounces	Users who also want to listen to audible book downloads from Audible.com	Audiophiles on a budget	Folks who want more features, such as video and an FM tuner, than an iPod nano
	Diminutive size	Supports MP3 & WMA files	Slot for removable microSD card	Light-up touchpad	MicroSD expansion slot for more memory
	\$149; \$199; \$249	\$59.99; \$79.99	\$99.99; \$129.99	\$119.99	\$119.99
					
	8046081	8316556	8001271	8273272	7995468

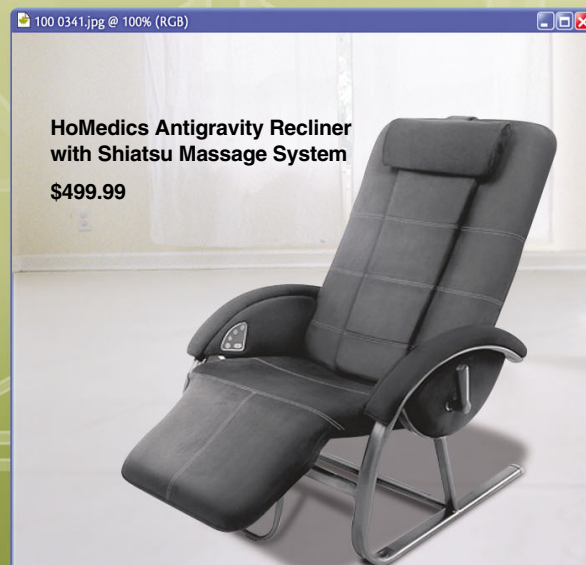
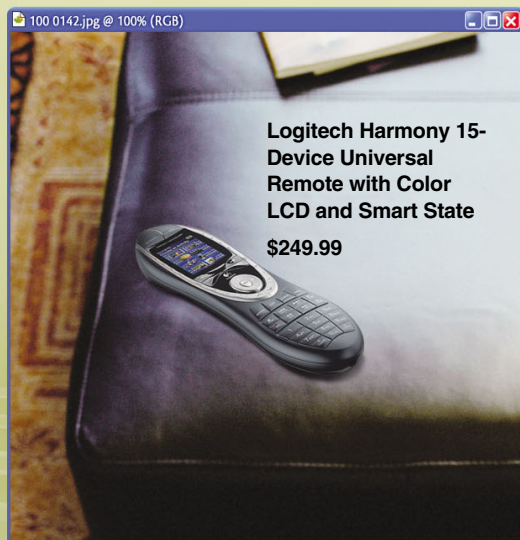
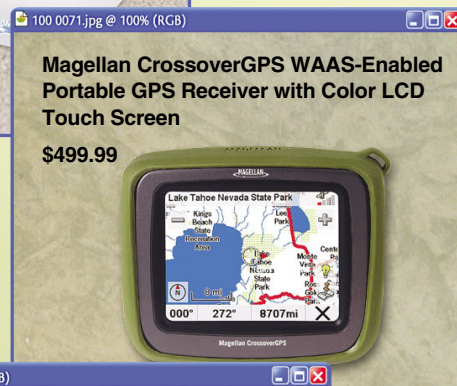
Which Cell Phone Is Right For You?

Your cell phone is more than a phone—it can be a camera, music player, text messenger, and fashion statement. All these features and more make the cell phone the must-have electronics device. Compare the features of cell phones available at Best Buy (www.bestbuy.com) to help find your next phone; we provide Best Buy's pricing (at press time), as well.

What It Is	What It Means	LG VX9400	LG Chocolate	Motorola RAZR Maxx VE
Form	The physical style of the phone	Candy bar with swivel screen	Slider, internal antenna	Clamshell
Bluetooth capability	Enables wireless communication with other devices	Yes	Yes	Yes
Internationally compatible	Uses GSM standard used in Europe and Asia	No	No	No
Voice-activated dialing	Dial your contacts by simply speaking into the phone	Yes	Yes	Yes
MP3 player	Plays digital music	Yes	Yes	Yes
Service plan provider(s)	What provider(s) the phone will work with	Verizon	Verizon	Verizon
Dimensions	Thickness and weight	0.7 inches; 4.1 ounces	0.69 inches; 3.53 ounces	0.6 inches; 4.06 ounces
Battery talk time	How long you can talk between charges	3.8 hours	3 hours	3.5 hours
Perfect For		Watching TV while you chat with friends	Style-conscious music lovers	Those who want full functionality in a small form factor
Coollest feature		VCAST streams live TV to your phone	Can record calls up to 1 minute	VCAST music and video downloads
Best Buy price (original; with service plan)		\$329.99; \$99.99	\$299.99; \$59.99	\$299.99; \$99.99
				

	Samsung SCH-u740	Motorola Q 	Palm Treo 700p 	Sanyo Katana II Midnight Steel	Samsung Upstage M620
	Clamshell	Candy bar; uses Windows Mobile	Candy bar; uses Palm OS	Clamshell, internal antenna	Candy bar
	Yes	Yes	Yes	Yes	Yes
	No	No	No	No	No
	Yes	Yes	No	Yes	Yes
	Yes	Yes	Yes	No	Yes
	Verizon	Sprint; Verizon	Sprint; Verizon	Sprint PCS	Sprint PCS
	0.58 inches; 3.6 ounces	0.47 inches; 4.06 ounces	0.9 inches; 6.4 ounces	0.6 inches; 3.4 ounces	0.8 inches; 4.2 ounces
	3.5 hours	4 hours	4.7 hours	3.1 hours	3 hours
	Talkers who love to text	Email and productivity addicts	Road warriors who need a mobile office	Families who want to restrict certain calls for young users	Talkers who also want an integrated MP3 player
	Full QWERTY keyboard for emailing and texting	Lightest, thinnest Windows smartphone	Near-broadband download speeds	Optional Sprint Family Locator uses GPS to locate family	Two-sided design: Phone on one side; MP3 player on the other
	\$299.99; \$79.99	\$499.99; \$99.99	\$549.99; \$299.99	\$199.99; \$29.99	\$349.99; \$29.99
					







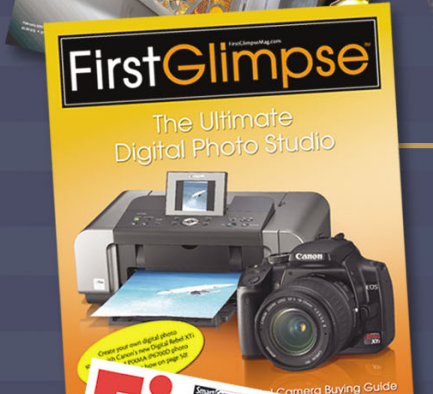
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